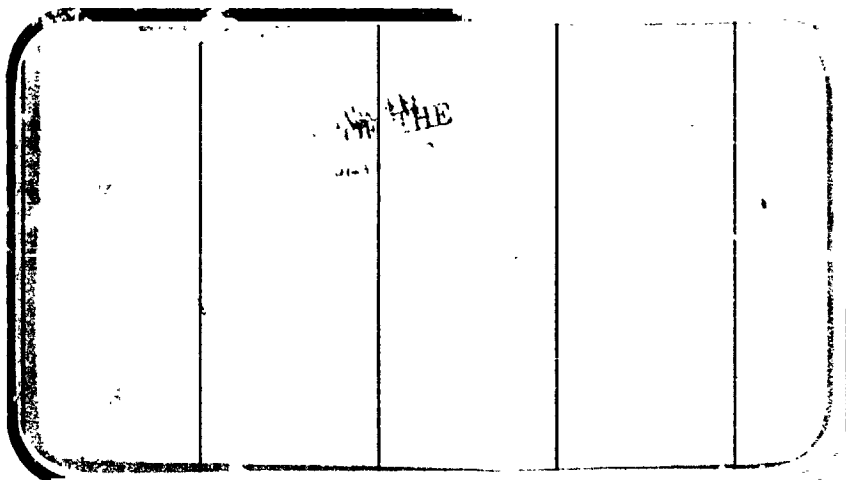




NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-

144596



(NASA-CR-144596) RESULTS OF HEAT TRANSFER
TESTS ON A 0.0175-SCALE SPACE SHUTTLE
ORBITER MODEL (56-0) IN THE AEDC VKI 'B'
HYPERSONIC WIND TUNNEL (OH74)
Aerothermodynamic Data Report (Chrysler

N76-21266

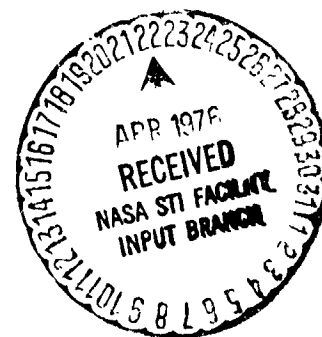
HC \$16.25

Unclas

G3/18 25045

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANAGEMENT services

SPACE DIVISION



CHRYSLER
CORPORATION

February, 1976

DMS-DR-2263
NASA CR-144,596

RESULTS OF HEAT TRANSFER TESTS
ON A 0.0175-SCALE SPACE SHUTTLE ORBITER
MODEL (56-0) IN THE AEDC VKF "B"
HYPERSONIC WIND TUNNEL (OH74)

by

W. H. Dye
Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

by

Data Management Services
Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division
Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number: AEDC VKF B V41B B8A
NASA Series Number: OH74
Model Number: 56-0
Test Dates: June 10 through June 12, 1975
Occupancy Hours: 12

FACILITY COORDINATOR:

L. Trimmer
AEDC-VKF/SH
Arnold Air Force Station
Tullahoma, Tennessee 37389

Phone: (615) 455-2611 Ext. 7377

AEROTHERMO ANALYSIS ENGINEER:

H. Gorowitz
Rockwell International
Space Division
12214 Lakewood Blvd.
Mail Code AC78
Downey, California 90241

Phone: (213) 922-1558

PROJECT ENGINEERS:

E. C. Allen
W. H. Dye
Rockwell International
Space Division
12214 Lakewood Blvd.
Mail Code AC07
Downey, California 90241

Phone: (213) 922-5007

E. Knox
AEDC-VKF/SH
Arnold Air Force Station
Tullahoma, Tennessee 37389

Phone: (615) 455-2611
Ext. 7377

DATA MANAGEMENT SERVICES:

Prepared by: Liaison--D. A. Sarver, V. W. Sparks
Operations--R. H. Lindahl

Reviewed by: D. E. Poucher

Approved: J. L. Glynn
J. L. Glynn, Manager
Data Operations

Concurrence: N. D. Kemp
N. D. Kemp, Manager
Data Management Services

Chrysler Corporation Space Division assumes no responsibility for the data presented other than display characteristics.

RESULTS OF HEAT TRANSFER TESTS
ON A 0.0175-SCALE SPACE SHUTTLE ORBITER
MODEL (56-0) IN THE AEDC VKF "B"
HYPERSONIC WIND TUNNEL (OH74)

by

W. H. Dye, Rockwell International Space Division

ABSTRACT

This report presents the results of aerodynamic heating tests conducted on a 0.0175-scale model of the Rockwell International Space Shuttle Orbiter. These tests were conducted in the Arnold Engineering and Development Center VKF "B" Hypersonic Wind Tunnel.

The tests were conducted at a nominal Mach number of 8 and model angles of attack varying between 20° and 45° .

TABLE OF CONTENTS

	Page
ABSTRACT	iii
INDEX OF MODEL FIGURES	2
INDEX OF DATA FIGURES	3
INTRODUCTION	6
NOMENCLATURE	7
CONFIGURATIONS INVESTIGATED	10
INSTRUMENTATION	11
TEST FACILITY DESCRIPTION	12
DATA REDUCTION	13
REFERENCES	16
TABLES	
I. TEST CONDITIONS	17
II. DATA SET RUN NUMBER COLLATION SUMMARY	18
III. MODEL DIMENSIONAL DATA	20
IV. THERMOCOUPLE LOCATIONS AND SKIN THICKNESSES	28
FIGURES	
MODEL	29
DATA	32
APPENDIX	
TABULATED SOURCE DATA	

INDEX OF MODEL FIGURES

Figure	Title	Page
1.	Instrumentation Location Definitions	29
2.	Model Sketch Showing Thin-Skin Insert and General TC Locations	30
3.	Axis Systems	31

INDEX OF DATA FIGURES

FIGURE NUMBER	TITLE	CONDITIONS VARYING	COEFFICIENTS SCHEDULE	PAGES
4	HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, $\beta = 0$	RN/L, ALPHA	A	1-7
5	HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR $\beta = 0$	RN/L, ALPHA	A	8-14
6	HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR $\beta = 0$	RN/L, ALPHA	A	15-21
7	HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR $\beta = 0$	RN/L, ALPHA	A	22-28
8	HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, $\beta = 1$	RN/L, ALPHA	A	29-34
9	HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR $\beta = 1$	RN/L, ALPHA	A	35-40
10	HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR $\beta = 1$	RN/L, ALPHA	A	41-46
11	HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR $\beta = 1$	RN/L, ALPHA	A	47-52
12	HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, $\beta = 2$	RN/L, ALPHA	A	53-57
13	HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR $\beta = 2$	RN/L, ALPHA	A	58-62
14	HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR $\beta = 2$	RN/L, ALPHA	A	63-67

INDEX OF DATA FIGURES (Continued)

FIGURE NUMBER	TITLE	CONDITIONS VARYING	COEFFICIENTS SCHEDULE	PAGES
15	HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = 2	RN/L, ALPHA	A	68-72
16	HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA = -1	RN/L, ALPHA	A	73-78
17	HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA = -1	RN/L, ALPHA	A	79-84
18	HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA = -1	RN/L, ALPHA	A	85-90
19	HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = -1	RN/L, ALPHA	A	91-96
20	HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA = -2	RN/L, ALPHA	A	97-100
21	HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA = -2	RN/L, ALPHA	A	101-104
22	HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA = -2	RN/L, ALPHA	A	105-108
23	HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = -2	RN/L, ALPHA	A	109-112
24	HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S	ALPHA, T/C NO.	B	113-130
25	HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S	ALPHA, T/C NO.	B	131-148

INDEX OF DATA FIGURES (Concluded)

FIGURE NUMBER	TITLE	CONDITIONS VARYING	COEFFICIENTS SCHEDULE	PAGES
26	HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S	ALPHA, T/C NO.	B	149-178
27	HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S	ALPHA, T/C NO.	B	179-208
28	HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (UPPER TANGENT TRACE T/C,S)	T/C NO.	C	209-211
29	HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (HINGE LINE TRACE T/C,S)	T/C NO.	C	212-214
30	HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (W. L. 400 TRACE T/C,S)	T/C NO.	C	215-219
31	HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (TRACE LINE A/B T/C,S)	T/C NO.	C	220-224

SCHEDULE OF COEFFICIENTS PLOTTED:

- (A) H/HREF versus X/L ($T_{aw} = 0.9 T_o$)
- (B) H/HREF versus RN/L ($T_{aw} = 0.9 T_o$)
- (C) H/HREF versus ALPHA ($T_{aw} = 0.9 T_o$)

INTRODUCTION

The data presented in this report are the results of aerodynamic heating tests conducted on a 0.0175-scale thin-skin thermocouple model of the Space Shuttle 140C Orbiter. The tests were conducted from June 10 to 12, 1975 in the Arnold Engineering and Development Center VKF "B" Hypersonic Wind Tunnel.

The purpose of these tests was to determine entry aerodynamic heating rates on the Orbiter fuselage side.

The model was tested at Mach no. 8 through a Reynolds number range of $.5 \times 10^6/\text{ft}$ to $3.77 \times 10^6/\text{ft}$. The model angle of attack range tested was from 20° to 45° with a sideslip range of 0° , $\pm 1^\circ$, $\pm 2^\circ$.

Table I lists the run conditions tested and Table II summarizes the test program. Tabulated and plotted data are presented in this report.

NOMENCLATURE

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
b		model skin thickness, in
c		chord, in
c_p		specific heat of model material, BTU/lbm - °R
dt	DT	incremental time, sec
$\frac{dT_w}{dt}$	DTWDT	derivation of the model wall temperature with respect to time, °R/sec
h	H(9T0)	heat transfer coefficient based on $T_{aw} = 0.9 T_0$, BTU/ft ² -sec-R
	H(T0)	heat transfer coefficient based on $T_{aw} = T_0$, BTU/ft ² -sec-R
	H(TAW)	heat transfer coefficient based on T_{aw} , BTU/ft ² -sec-R
h_{ref}	HREF	reference heat transfer coefficient, BTU/ft ² -sec-R
h/h_{ref}	H/HREF	ratio of heat transfer coefficient to reference heat transfer coefficient
h_i/h_0	HI/HO	ratio of interference heat transfer coefficient to stagnation heat transfer coefficient
h_i/h_u	HI/HU	ratio of interference heat transfer coefficient to undisturbed heat transfer coefficient
h_u/h_0	HU/HO	ratio of undisturbed heat transfer coefficient to stagnation heat transfer coefficient
H		enthalpy, BTU/lbm
L	L	length, in
M	MACH	Mach number
P_0	P0	stagnation pressure, psia

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
P_{∞}	P	free stream pressure, psia
q_{∞}	Q	free stream dynamic pressure, psia
\dot{q}	QDOT	heat transfer rate per unit area, BTU/ft ² sec
Q_i		initial heat transfer rate, BTU/sec
r	R	adiabatic wall temperature ratio, T_{aw}/T_o (recovery factor). NOTE: Where $R = 0.0$ in displayed data, the heat transfer coefficient has been calculated using a recovery factor calculated from $T_{aw}/T_o = (0.867 + 0.133 \sin 1.55 \delta)$, where $\delta = (\alpha + \theta)$. Alpha is the model angle of attack and theta is local surface angle.
St	STNNO	theoretical stagnation point Stanton number for a 0.0175 foot (1 scale foot) radius sphere calculated from Fay-Riddell theory
Re/ft	RN/L	unit Reynolds number, per foot
T	T	temperature, °R
T_o	TJ	stagnation temperature, °R
T_{wi}		initial model skin temperature, °R
T_w	TW	model wall temperature, °R
	TRACE	1 - thermocouple numbers 1-17 2 - thermocouple numbers 18-30 3 - thermocouple numbers 31-55 4 - thermocouple numbers 56-80
T_{aw}	TAW	adiabatic wall temperature, °R
T/C	T/C NO	thermocouple number
V_{∞}	V	free stream velocity, ft/sec

NOMENCLATURE (Concluded)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
W	RHO	model skin density, lbm/ft ³
x	X	axial distance from nose to corresponding component, in
x/L	X/L	longitudinal location, fraction of length
y	Y	spanwise distance from centerline, in
z	W.L.	waterplane distance, in
α	ALPHA	angle of attack, degrees
δ_a	AILRON	aileron deflection angle, degrees
β	BETA	sideslip angle, degrees
δ_{BF}	BDFLAP	body flap deflection angle, degrees
δ_e	ELEVON	elevon deflection angle, degrees
μ_∞	MU	free stream viscosity, lb-sec/ft
ϕ	PHI	radial location on tank, degrees
δ_r	RUDDER	rudder deflection angle, degrees
ψ	YAW	model yaw angle, degrees

CONFIGURATIONS INVESTIGATED

The model used for these tests is a 0.0175-scale model of the Rockwell International Space Shuttle 140C Orbiter.

To investigate fuselage side heating an instrumented thin sk'n insert was attached to model 2-B of the 56-0 phase change paint models. The insert was attached to the left side of the Orbiter fuselage forming the body contour.

The following is a list of the model components and nomenclature tested:

<u>Component</u>	<u>Definition</u>
B ₆₂	Fuselage per Rockwell lines VL70-000140C
C ₁₂	Canopy per Rockwell lines VL70-000140C
E ₅₂	Elevons per Rockwell lines VL70-000140C
F ₁₀	Body flap per Rockwell lines VL70-000140C
M ₁₆	OMS pods per Rockwell lines VL70-000140C
R ₁₉	Rudder per Rockwell lines VL70-000140C
V ₈	Vertical per Rockwell lines VL70-000140C
W ₁₂₇	Wing per Rockwell lines VL70-000140C

INSTRUMENTATION

The model thin skin insert was instrumented with 80 chromel constantan thermocouples. Table IV lists the thermocouple locations and skin thicknesses. The nominal skin thickness was 0.020 in. Figure 2 also illustrates the thermocouple locations.

TEST FACILITY DESCRIPTION

The Arnold Engineering Development Center (AEDC) is an Air Force Facility located in Tullahoma, Tennessee. The tunnel used, Tunnel B, is located in the Von Karman Facility portion of this center. Engineering and other technical operations in this tunnel are performed by contractor personnel of ARO, Inc.

Tunnel B is a continuous, closed circuit, variable density wind tunnel with an axisymmetric contoured nozzle and a 50-inch diameter test section. The tunnel can be operated at a nominal Mach number of 6 or 8 at stagnation pressures from 20 to 300 and 50 to 900 psia, respectively, and at a stagnation temperature of up to 1350°R. The model may be injected into the tunnel for a test run and then retracted for model cooling or model changes without interrupting the tunnel flow.

DATA REDUCTION

Thermocouple outputs were recorded on magnetic tape at the rate of 20 times per second from the start of the injection cycle until about 4 seconds after the model reached the tunnel centerline. The heat transfer coefficient, h , was computed from the relation

$$h = Wbc_p \frac{d \left[\ln \left(\frac{T_o - T_{wi}}{T_o - T_w} \right) \right]}{dt}$$

where

W = model skin density, lbm/ft^3

b = model skin thickness, ft

c_p = model skin specific heat, $\text{BTU/lbm} \cdot ^\circ\text{R}$

T_{wi} = initial model skin temperature, $^\circ\text{R}$

This relation was derived from the equation

$$h = \frac{Wbc_p \frac{dT_w}{dt}}{T_o - T_w}$$

which neglects conduction losses and the assumptions that h , W , and c_p are constants.

If conduction losses are indeed very small, then

$$\ln \left[\frac{T_o - T_{wi}}{T_o - T_w} \right]$$

versus time is very nearly linear. Even when conduction effects are significant, a small linear portion of the curve can generally be found

DATA REDUCTION (Continued)

near the initial time. It is for this reason that a linear least squares curve fit of $\ln((T_0 - T_{wi})/(T_0 - T_w))$ versus time, beginning at the time the model reached uniform flow, was used to compute the derivative

$$-\frac{d[\ln(\frac{T_0 - T_{wi}}{T_0 - T_w})]}{dt}$$

The lengths of the curve fits were kept as short as possible without measuring system noise characteristics. These curve fit lengths are given below:

Range	No. of Points
$32 < \frac{dT_w}{dt}$	5
$16 < \frac{dT_w}{dt} \leq 32$	7
$8 < \frac{dT_w}{dt} \leq 16$	9
$4 < \frac{dT_w}{dt} \leq 8$	13
$2 < \frac{dT_w}{dt} \leq 4$	17
$1 < \frac{dT_w}{dt} \leq 2$	25
$\frac{dT_w}{dt} < 1$	41

The following expression was evaluated at the midpoint of the time interval used for each thermocouple:

$$c_p = 0.0797 + (5.556 \times 10^{-5}) T_w$$

DATA REDUCTION (Concluded)

The maximum observed variation of c_p was less than one percent. Thus, the assumption of constant c_p was reasonable. The value of density used for the 17-4 PH stainless steel skin was $W = 490.0 \text{ lbm/ft}^3$. The skin thickness (b) for each thermocouple is listed in Table IV.

REFERENCES

1. Test Facilities Handbook (Tenth Edition). "Von Karman Gas Dynamics Facility, Vol. 3". Arnold Engineering Development Center, May, 1974 SD75-SH-0118,V.
2. "Pretest Information for Testing the 56-0 0.0175-Scale Thermocouple Insert Model in the AEDC/VKF B Wind Tunnel" by W. H. Dye, May 14, 1975 .
3. Data Report: "NASA 'Rockwell OH74 Heat Transfer", Arnold Engineering Development Center, June 13, 1975, Project No. V41B-B8A.

TABLE I.
TEST CONDITIONS

Nominal test conditions at which the tests were conducted are given below:

<u>Mach No.</u>	<u>P0, psia</u>	<u>T0, °R</u>	<u>HREF</u> <u>Btu/ft²-sec-°R</u>	<u>RN/L x 10⁻⁶</u>
7.88	84	1178	0.0154	0.46
7.94	188	1250	0.0232	0.95
7.96	300	1269	0.0289	1.45
7.98	419	1290	0.0342	1.95
7.98	546	1305	0.0392	2.50
7.99	673	1338	0.0436	2.96
8.00	807	1348	0.0476	3.50
8.00	864	1344	0.0492	3.77

TABLE II.

[illegible]

TEST: $\phi H-74$ (HEDC x 41B - 18A)			DATA SET RUN NUMBER COLLATION SUMMARY										DATE: 2/9/76 - Revised		
DATA SET IDENTIFIER	CONFIGURATION	SCHD. α β	PARAMETERS/VALUES		NO. OF RUNS	REYNOLDS NUMBER/FT x 10 ⁻⁶									
						0.5	1.0	1.5	2.0	2.5	3.0	3.5	3.7		
RV3003	$\phi RBITER$	20-2			5	82					109	62	97	74	
		25-2			1	83									
		30-2			7	84		38	50	110	63	93	75		
		35-2			1	86									
		40-2			3	85		39	51						
RV3004	$\phi RBITER$	20-1			1	7									
		25-1			1	8									
		30-1			2	9	22								
		35-1			2	10	23								
		40-1			1		24								
		45-1			2	11	25								
RV3005	$\phi RBITER$	20-2			1	12									
		25-2			1	13									
		30-2			2	14	26								
		40-2			2	15	27								

TYPE OF DATA
 α OR β
 SCHEDULES

COEFFICIENT SCHEDULES

1CVAR (1) 1CVAR (2) 1CVAR (3)

TABLE III.
MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - B₆₂

GENERAL DESCRIPTION : Configuration 140C orbiter fuselage, MCR 200-R4
Similar to 140A/B fuselage except aft body revised and improved
midbody-wing-boot fairing, X_o = 940 to X_o = 1040.

MODEL SCALE: 0.0175

DRAWING NUMBER : VL70-000140C, -000202C, -000205A
VL70-000200B, -000203

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (IML: FWD Sta X _o =238), In.	1290.3	22.58
Length (OML: Fwd Sta X _o =235), In.	1293.3	22.63
Max Width (At X _o = 1528.3), In.	264.0	4.62
Max Depth (At X _o = 1464), In.	250.0	4.38
Fineness Ratio	4.899	4.899
Area - Ft ²		
Max. Cross-Sectional	340.885	0.104
Planform		
Wetted		
Base		

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : CANOPY - C₁₂
 GENERAL DESCRIPTION : Configuration 140C orbiter canopy. Vehicle
cabin No. 31 updated to MCR 200-R4. Used with fuselage B₆₂.

 MODEL SCALE: 0.0175
 DRAWING NUMBER : VL70-000140C, -000202B, -000204

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ($X_O = 434.643$ to 578), In.	<u>143.357</u>	<u>2.508</u>
Max Width (At $X_O = 513.127$), In.	<u>152.412</u>	<u>2.667</u>
Max Depth ($Z_O = 501$ to 449.39), In.	<u>51.61</u>	<u>0.903</u>
Fineness Ratio	_____	_____
Area	_____	_____
Max. Cross-Sectional	_____	_____
Planform	_____	_____
Wetted	_____	_____
Base	_____	_____

TABLE III.- MODEL DIMENSIONAL DATA- Continued.

MODEL COMPONENT: ELEVON - E₅₂

GENERAL DESCRIPTION: Elevon for configuration 140C. Hingeline at X₀ = 1387, elevon split line X_w = 312.5, 6.0", beveled edges, and centerbodies.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000140C, -006089, -006092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft ²	<u>210.0</u>	<u>0.064</u>
Span (equivalent) - In.	<u>349.2</u>	<u>6.111</u>
Inb'd equivalent chord- In.	<u>118.0</u>	<u>2.065</u>
Outb'd equivalent chord	<u>55.19</u>	<u>0.966</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
At Outb'd equiv. chord	<u>0.4004</u>	<u>0.4004</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.0</u>	<u>0.0</u>
Trailing Edge	<u>- 10.056</u>	<u>- 10.056</u>
Hingeline	<u>0.0</u>	<u>0.0</u>
Area Moment (Product of area & c) (Normal to hingeline) Ft ³	<u>1587.25</u>	<u>0.008</u>
Mean Aerodynamic Chord In.	<u>90.7</u>	<u>1.587</u>
Hingeline dihedral (origin at Z ₀ = 261.3509), deg.	<u>5.229</u>	<u>5.229</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : BODY FLAP - F₁₀

GENERAL DESCRIPTION : Configuration 140C body flap. Hingeline located
at X₀ = 1532, Z₀ = 287.

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-000140C, -355114

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (X ₀ = 1525.5 to X ₀ = 1613), In.	87.50	1.531
Max Width (At L.E., X ₀ = 1525.5), In.	256.00	4.480
Max Depth (X ₀ = 1532), In.	19.798	0.346
Fineness Ratio		
Area - Ft ²		
Max. Cross-Sectional (At H.L.)	35.196	0.011
Planform	135.00	0.041
Wetted		
Base (X ₀ = 1613)	4.89	0.0015

TABLE III. - MODEL DIMENSIONAL DATA- Continued.

MODEL COMPONENT : OMS POD - M₁₆

GENERAL DESCRIPTION : Configuration 140C orbiter OMS Pod - short pod.

MODEL SCALE: 0.0175

DRAWING NUMBER : VL70-008401, -008410

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta $X_o = 1310.5$), In.	<u>258.50</u>	<u>4.524</u>
Max Width (At $X_o = 1511$), In.	<u>136.8</u>	<u>2.394</u>
Max Depth (At $X_o = 1511$), In.	<u>74.70</u>	<u>1.307</u>
Fineness Ratio	<u>2.484</u>	<u>2.484</u>
Area = F_t^2	<u></u>	<u></u>
Max. Cross-Sectional	<u>58.864</u>	<u>0.018</u>
Planform	<u></u>	<u></u>
Wetted	<u></u>	<u></u>
Base	<u></u>	<u></u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: RUDDER - R₁₉

GENERAL DESCRIPTION: Configuration 140C orbiter rudder used on center-
line vertical tail V₉. 30 deg. bevel and 0.5" gaps between rudder panels are
unsealed.

MODEL SCALE: 0.0175

DRAWING NUMBER: MCR Rev. 7

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft ²	<u>100.15</u>	<u>0.031</u>
Span (equivalent) - In.	<u>201.0</u>	<u>3.517</u>
Inb'd equivalent chord - In.	<u>91.585</u>	<u>1.603</u>
Outb'd equivalent chord - In.	<u>50.833</u>	<u>0.900</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Trailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
(Product of area & \bar{c}),		
Area Moment (Normal to Hingeline) Ft ³	<u>610.92</u>	<u>0.003</u>
Mean Aerodynamic Chord, In.	<u>73.2</u>	<u>1.281</u>

TABLE III. - MODEL DIMENSIONAL DATA- Continued.

MODEL COMPONENT: VERTICAL - V₈

GENERAL DESCRIPTION: Configuration 140C orbiter vertical tail (identical to configuration 140A/B vertical tail).

MODEL SCALE: 0.0175

DRAWING NUMBER: VL70-00140C, -000146B

DIMENSIONS:	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) - Ft ²		
Planform	413.253	0.127
Span (Theo) - In.	315.72	5.525
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.404	0.404
Sweep-Back Angles, Degrees.		
Leading Edge	45.000	45.000
Trailing Edge	26.25	26.25
0.25 Element Line	41.13	41.13
Chords:		
Root (Theo) WP	268.50	4.699
Tip (Theo) WP	108.47	1.898
MAC	199.81	3.497
Fus. Sta. of .25 MAC	1463.35	25.609
W.P. of .25 MAC	635.52	11.122
B.L. of .25 MAC	0.0	0.0
Airfoil Section		
Leading Wedge Angle - Deg.	10.00	10.00
Trailing Wedge Angle - Deg.	14.92	14.92
Leading Edge Radius	2.00	2.00
Void Area	13.17	0.0040
Blanketed Area	0.0	0.0

TABLE III. - MODEL DIMENSIONAL DATA - Concluded.

MODEL COMPONENT: WING-W₁₂₇

GENERAL DESCRIPTION: Configuration 140C orbiter wing, MCR 200-R4. Similar to 140A/B wing W₁₁₆ but with refinements: improved wing-boot-midbody fairing (X₀ = 940 to X₀ = 1040). Elevon split line relocated from Y₀ = 281 to Y₀ = 312.5).

MODEL SCALE: 0.0175

TEST NO.

DWG. NO. VL70-000140C, -000200BDIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATAArea (Theo.) Ft²

Planform

2690.00

0.824

Span (Theo) In.

936.68

16.392

Aspect Ratio

2.265

2.265

Rate of Taper

1.177

1.177

Taper Ratio

0.200

0.200

Dihedral Angle, degrees

3.500

3.500

Incidence Angle, degrees

0.500

0.500

Aerodynamic Twist, degrees

3.000

3.000

Sweep Back Angles, degrees

Leading Edge

45.000

45.000

Trailing Edge

- 10.065

- 10.065

0.25 Element Line

35.209

35.209

Chords:

Root (Theo) B.P.O.O.

689.24

12.062

Tip, (Theo) B.P.

137.85

2.412

MAC

474.81

8.309

Fus. Sta. of .25 MAC

1136.83

19.895

W.P. of .25 MAC

290.58

5.085

B.L. of .25 MAC

182.13

3.187

EXPOSED DATAArea (Theo) Ft²

1751.50

0.536

Span, (Theo) In. BP108

720.68

12.612

Aspect Ratio

2.059

2.059

Taper Ratio

0.245

0.245

Chords

Root BP108

562.09

9.837

Tip 1.00 $\frac{b}{2}$

137.85

2.412

MAC

392.83

6.875

Fus. Sta. of .25 MAC

1185.98

20.755

W.P. of .25 MAC

294.30

5.150

B.L. of .25 MAC

251.77

4.406

Airfoil Section (Rockwell Mod NASA)
XXXX-64Root $\frac{b}{2}$ =

0.113

0.113

Tip $\frac{b}{2}$ =

0.120

0.120

Data for (1) of (2) Sides

Leading Edge Cuff

Planform Area Ft²

115.18

0.035

Leading Edge Intersects Fus M. L. @ Sta

500.00

8.750

Leading Edge Intersects Wing @ Sta

1024.0

17.920

REPRODUCIBILITY OF THERMOCUPLE LOCATIONS AND SKIN THICKNESSES
ORIGINAL PAGE IS POOR

TABLE IV.
THERMOCUPLE LOCATIONS AND SKIN THICKNESSES

T/C No.	b, in.	X/L	Z
1	0.0215	0.275	437.5
2	0.0210	0.300	442.0
3	0.0217	0.325	445.0
4	0.0215	0.350	
5	0.0212	0.375	
6	0.0217	0.400	
7	0.0215	0.425	
8	0.0218	0.450	
9	0.0219	0.475	
10	0.0220	0.500	
11	0.0220	0.525	
12	0.0222	0.550	
13	0.0220	0.600	
14	0.0220	0.650	
15	0.0228	0.700	
16	0.0220	0.750	
17	0.0230	0.800	445.0
18	0.0190	0.285	420.0
19	0.0189	0.337	
20	0.0189	0.390	
21	0.0190	0.426	
22	0.0200	0.478	
23	0.0200	0.530	
24	0.0205	0.567	
25	0.0205	0.620	
26	0.0205	0.670	
27	0.0207	0.705	420.0

T/C No.	b, in.	X/L	Z
28	0.0203	0.750	420.0
29	0.0202	0.800	420.0
30	0.0160	0.824	420.0
31	0.0210	0.200	400.0
32	0.0199	0.225	
33	0.0199	0.250	
34	0.0186	0.275	
35	0.0180	0.300	
36	0.0190	0.325	
37	0.0192	0.350	
38	0.0190	0.375	
39	0.0189	0.400	
40	0.0188	0.425	
41	0.0195	0.450	
42	0.0200	0.475	
43	0.0200	0.500	
44	0.0190	0.525	
45	0.0200	0.550	
46	0.0205	0.600	
47	0.0210	0.650	
48	0.0202	0.700	
49	0.0205	0.750	
50	0.0208	0.800	
51	0.0180	0.850	
52	0.0180	0.875	
53	0.0160	0.900	
54	0.0170	0.925	400.0

T/C No.	b, in.	X/L	Z
55	0.0220	0.950	400.0
56	0.0170	0.300	372.5
57	0.0170	0.325	
58	0.0170	0.350	
59	0.0170	0.375	
60	0.0170	0.400	
61	0.0170	0.425	
62	0.0172	0.450	
63	0.0175	0.475	
64	0.0180	0.500	
65	0.0180	0.525	
66	0.0190	0.550	
67	0.0198	0.600	
68	0.0190	0.650	
69	0.0200	0.700	
70	0.0200	0.750	372.5
71	0.0195	0.200	355.0
72	0.0190	0.225	
73	0.0190	0.250	
74	0.0180	0.275	
75	0.0185	0.800	
76	0.0188	0.850	
77	0.0170	0.875	
78	0.0172	0.900	
79	0.0180	0.925	
80	0.0190	0.950	355.0

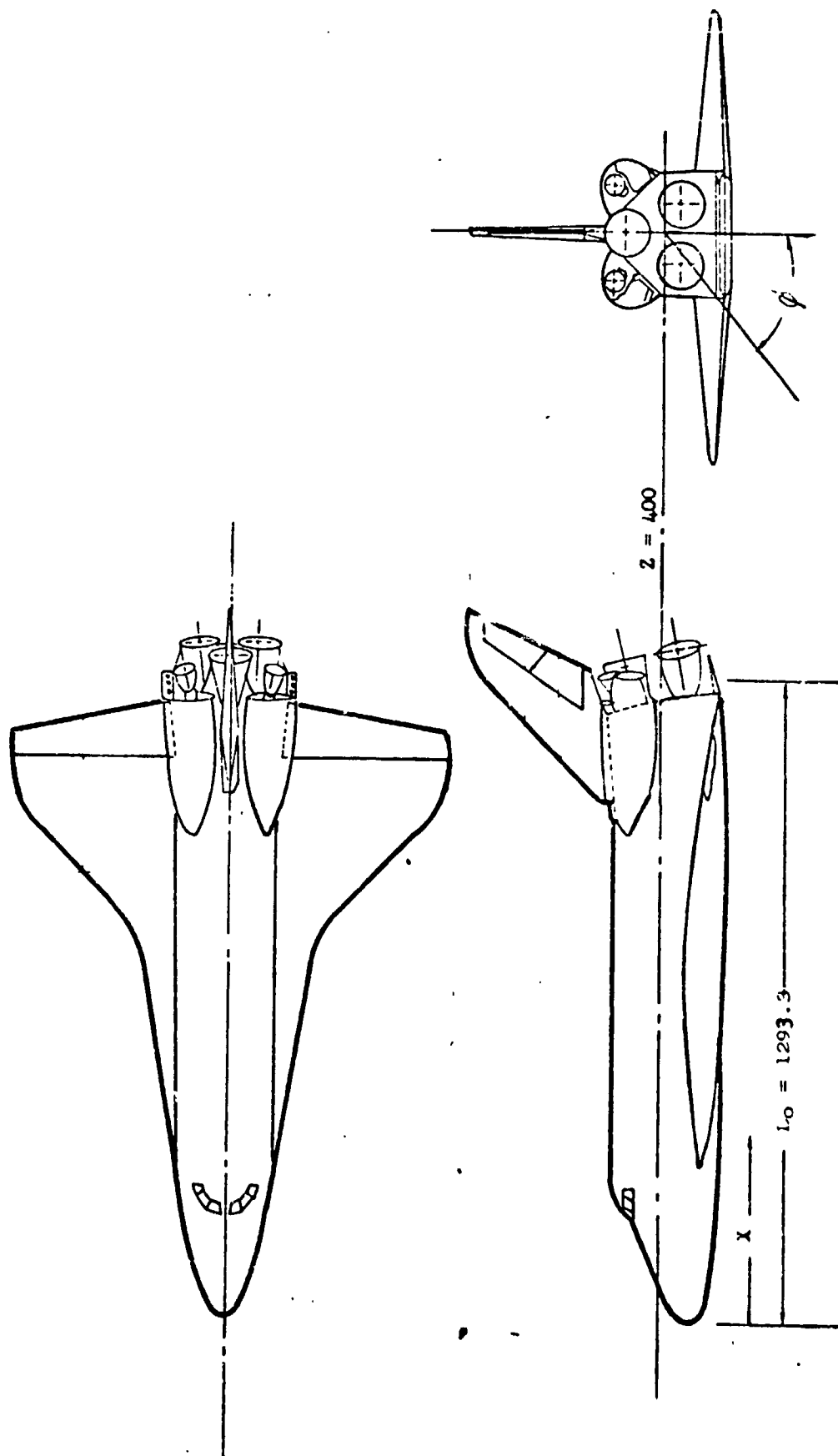
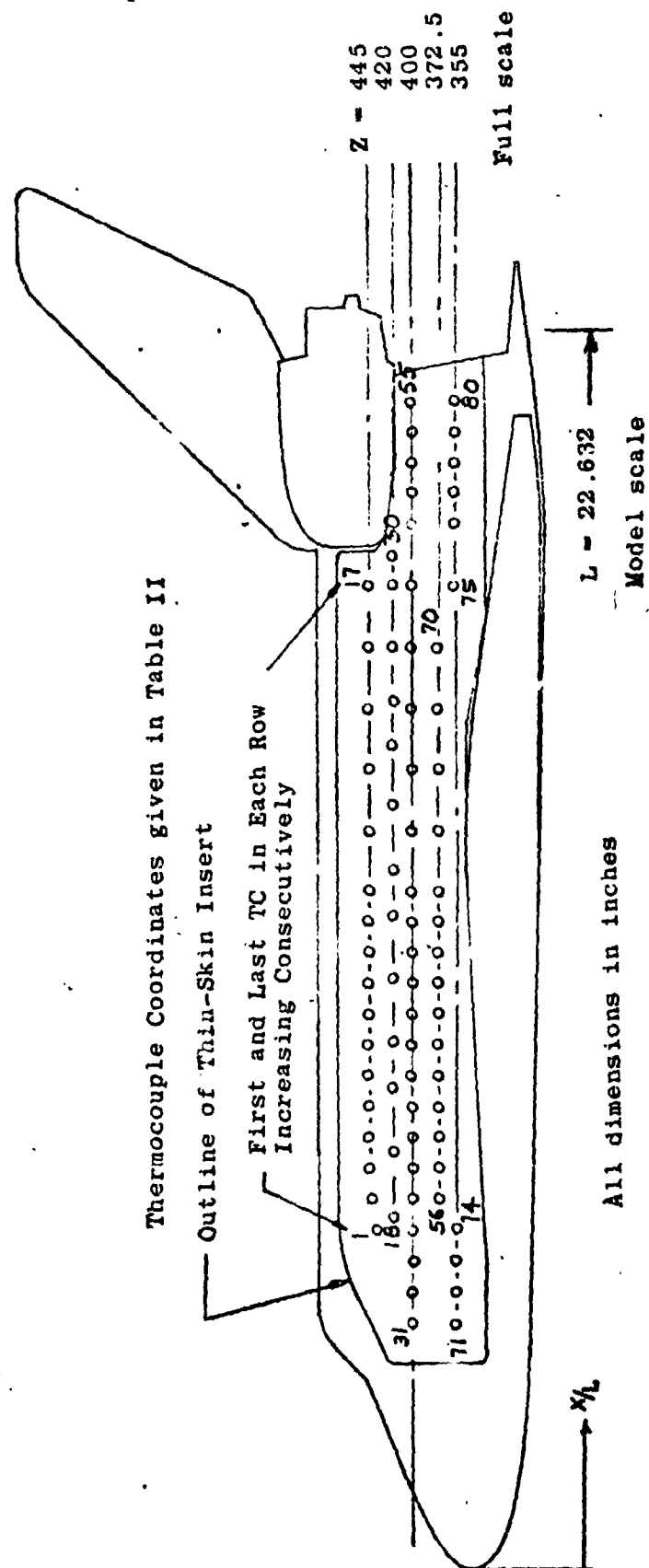


Figure 1. - Instrumentation Location Definitions



Notes:

1. Positive directions of angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

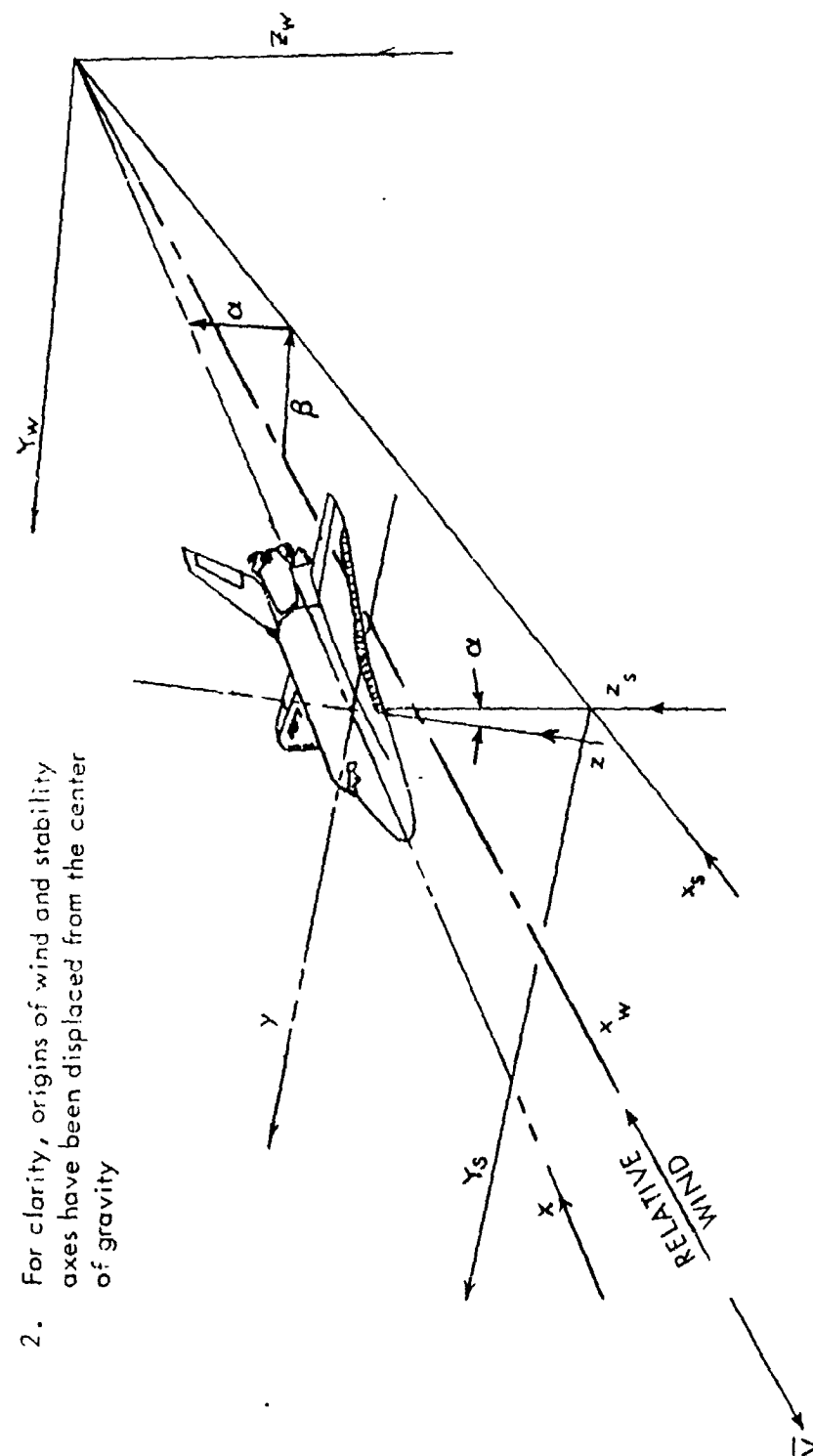
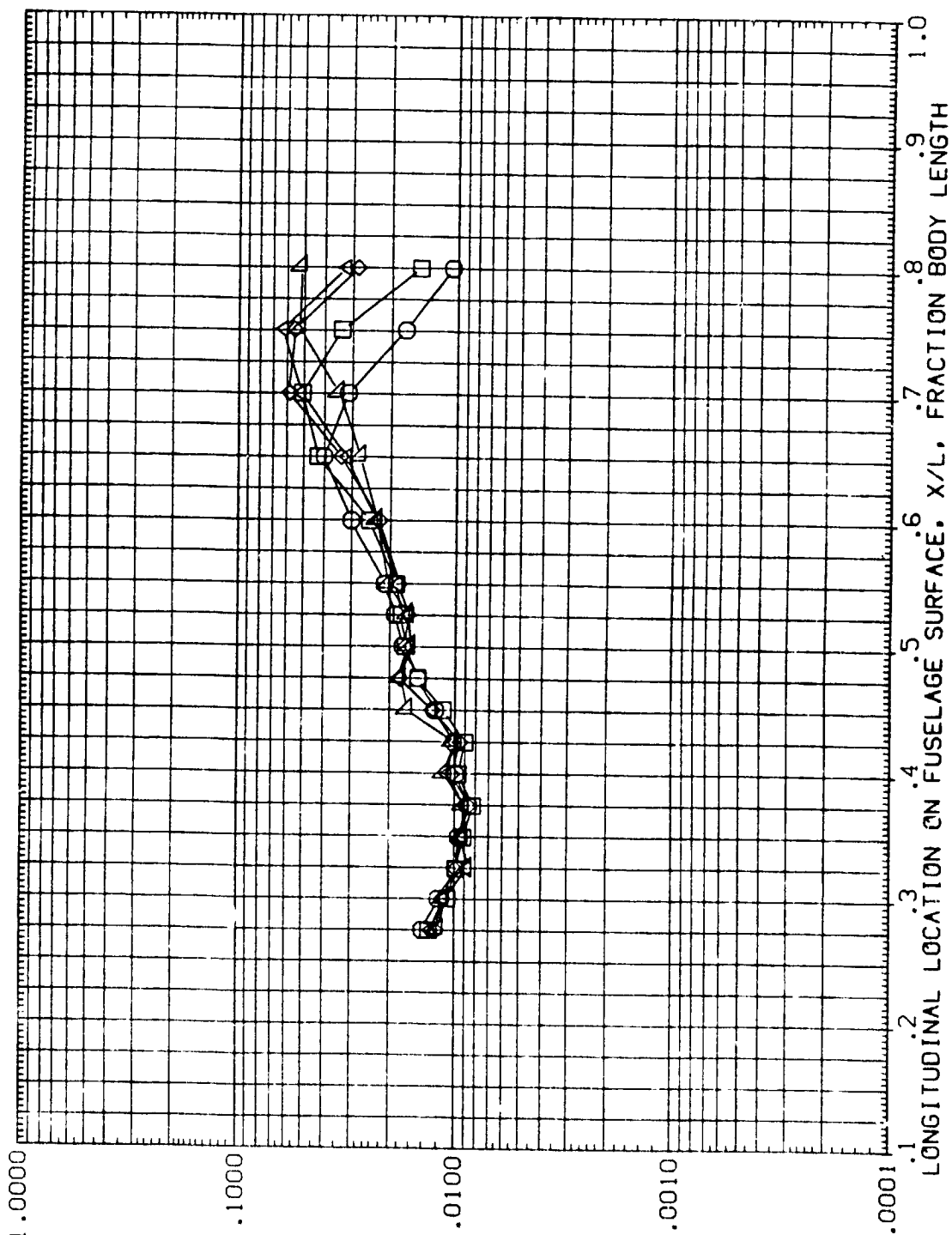


Figure 3. - Axis Systems.

DATA FIGURES

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	8.000
◇	.467	1.000	19.710	ELEVON	.000	RUDDER	.000
◇	.951						
◇	1.951						
◇	2.471						
◇	3.773						



MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

FIG. 4 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA = 0

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	RV/L	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	8.000
○	2.970	1.000	20.030	ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

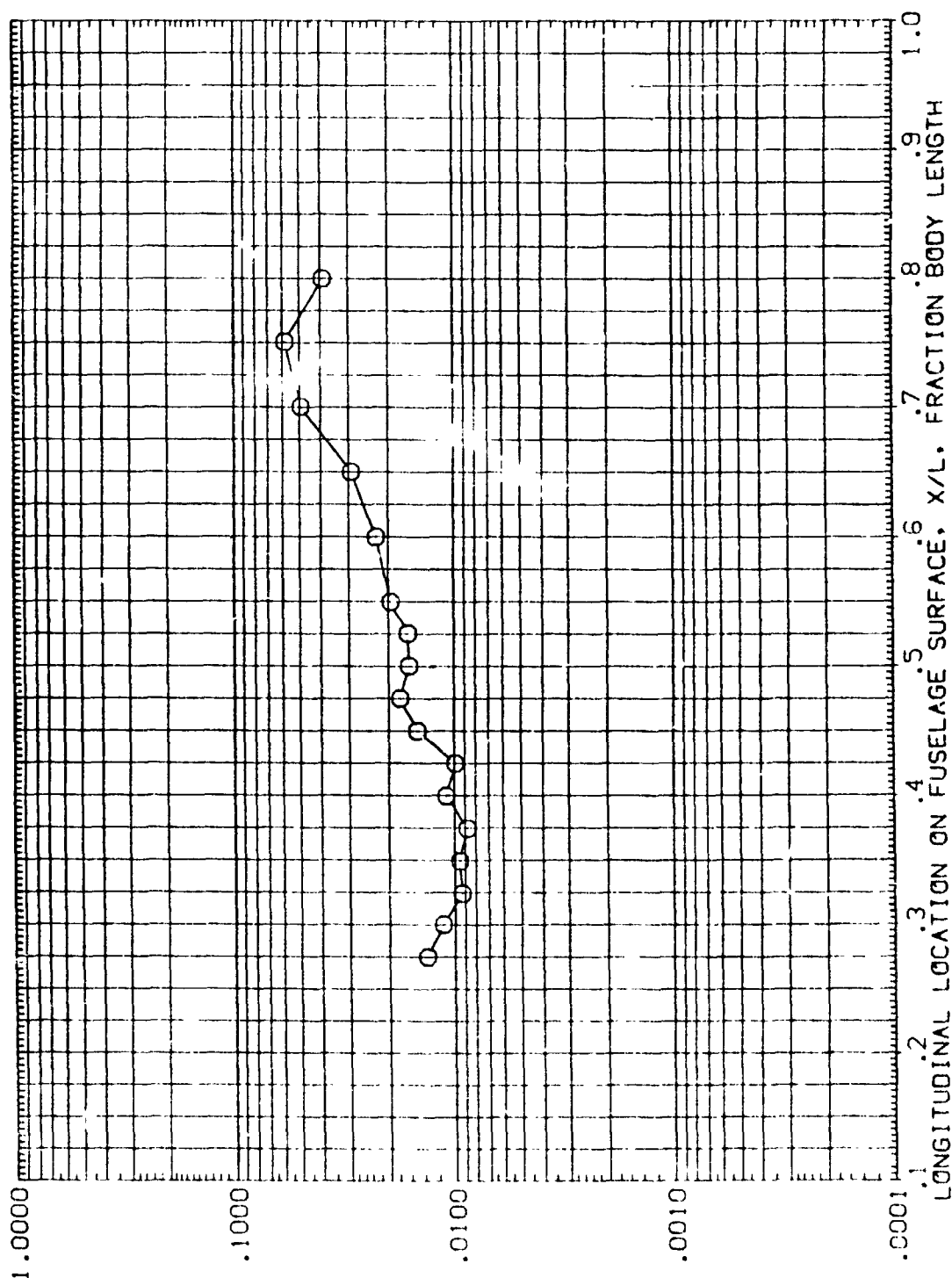


FIG. 4 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=0

JH-74 (AEDC V41B-B8A) R62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
 .000 MACH 8.000
 .000 RUDDER

TRACE ALPHA
 1.000 24.830

SYMBOL RN/L
 .467
 .951
 1.951
 2.471
 2.970

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

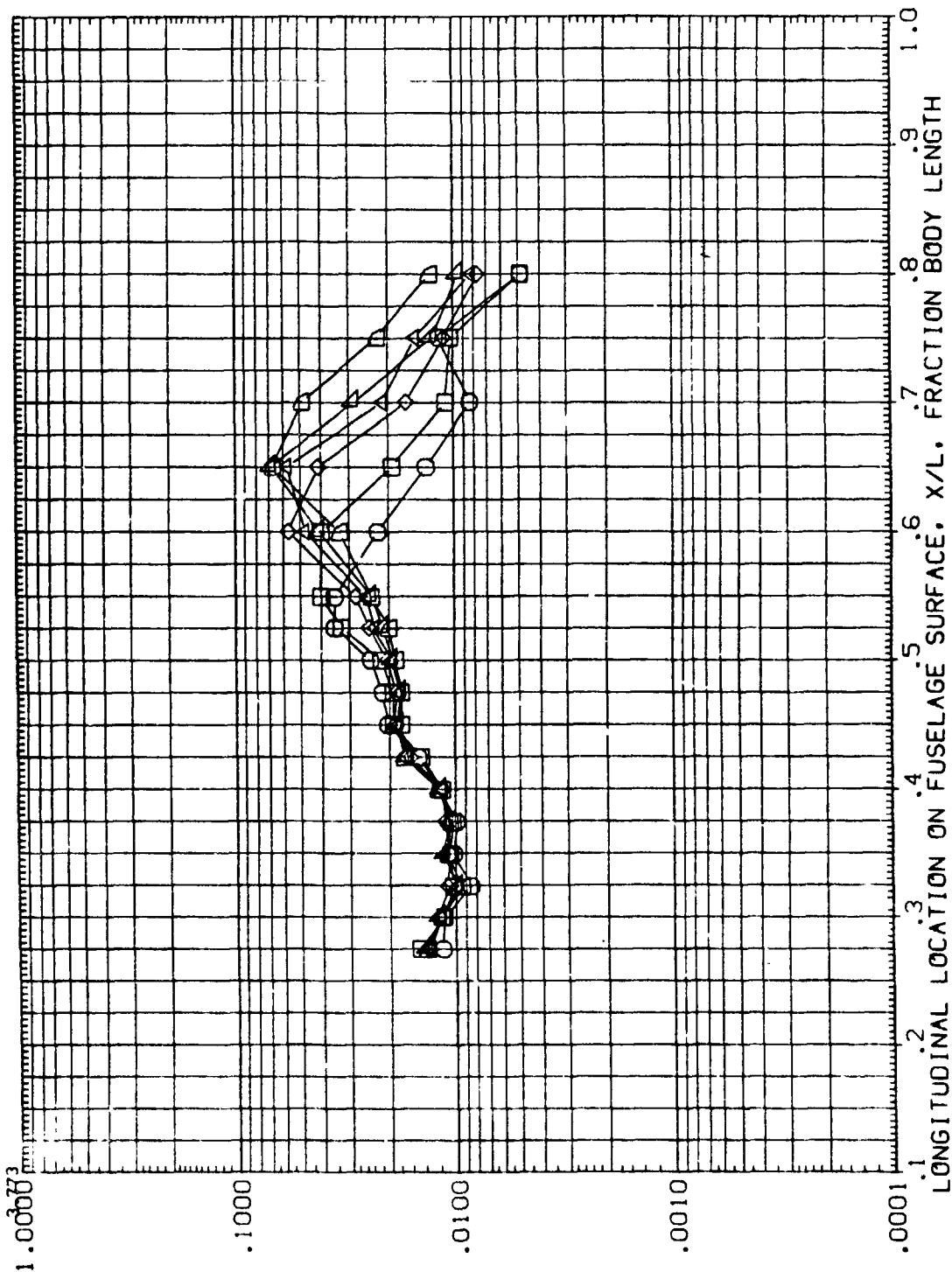


FIG. 4 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=0

7H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
BETA .000 MACH 8.000
ELEVON .000 RUDDER .000

TRACE ALPHA
1.000 29.770

SYMBOL RN/L
◇ .467
◇ .951
◇ 1.951
◇ 2.471
◇ 2.970

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

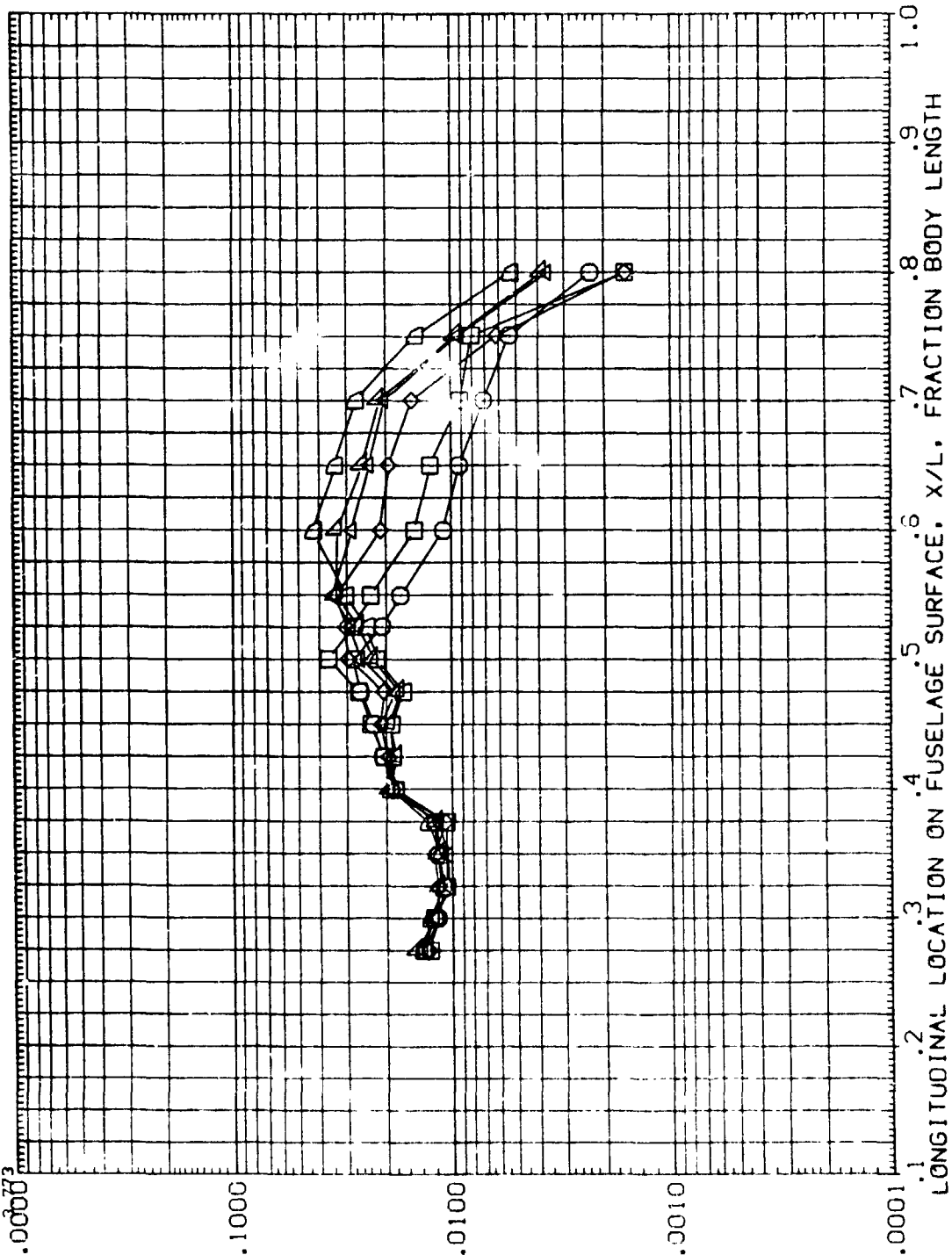


FIG. 4 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA= 0

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVR001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE ALPHA
 1.000 34.760

RN L
 467
 .951
 1.951
 2.47
 2.970

SYMBOL
 □
 ◇
 △
 ▽
 ○

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

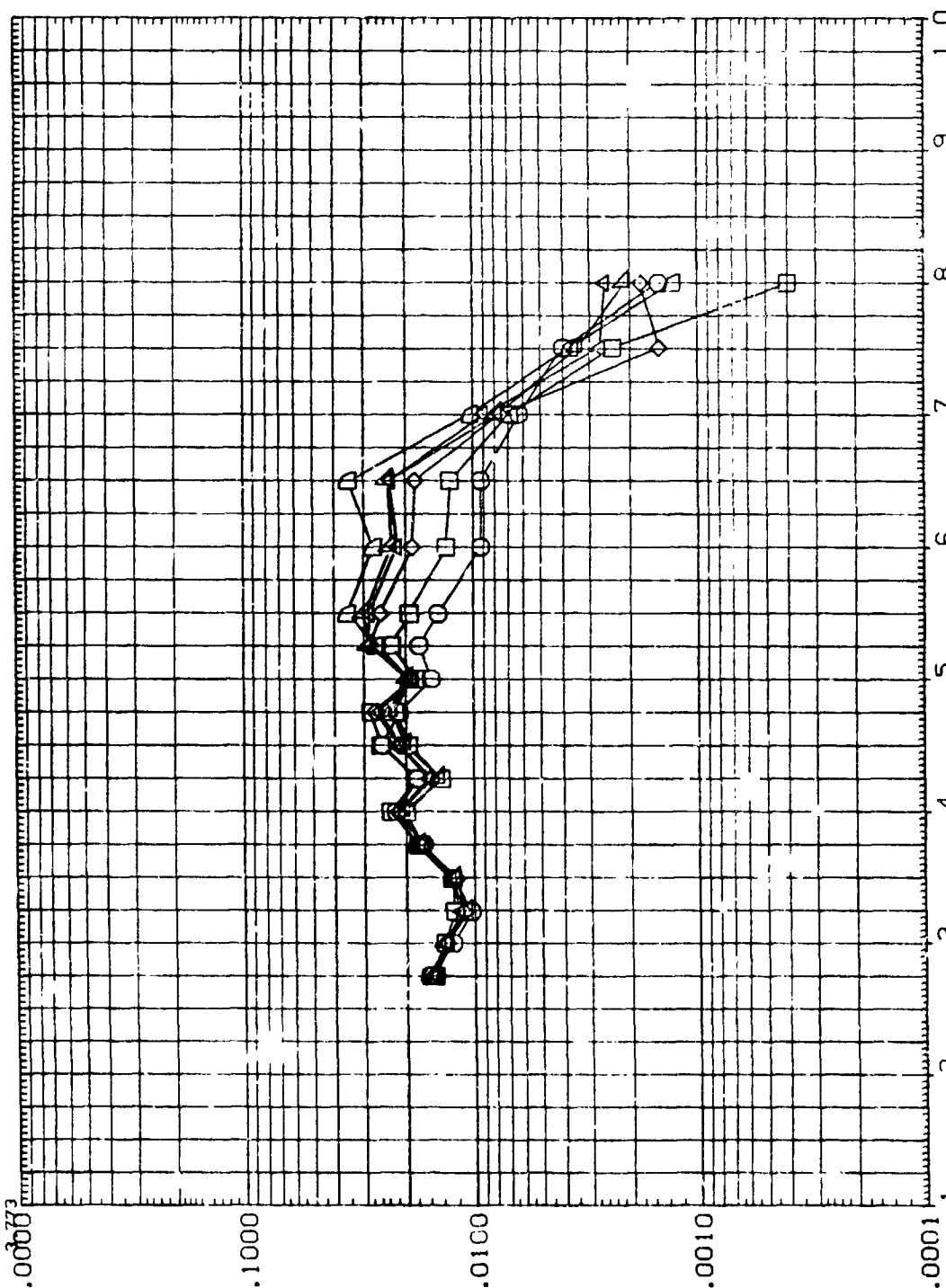


FIG. 4 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=0

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
BETA .000 MACH .000
ELEVON .000 RUDDER .000

TRACE ALPHA
1.000 39.790

SYMBOL RN/L
□ .467
◇ .951
△ 1.951
▽ 2.771
▽ 2.970

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .94/HREF

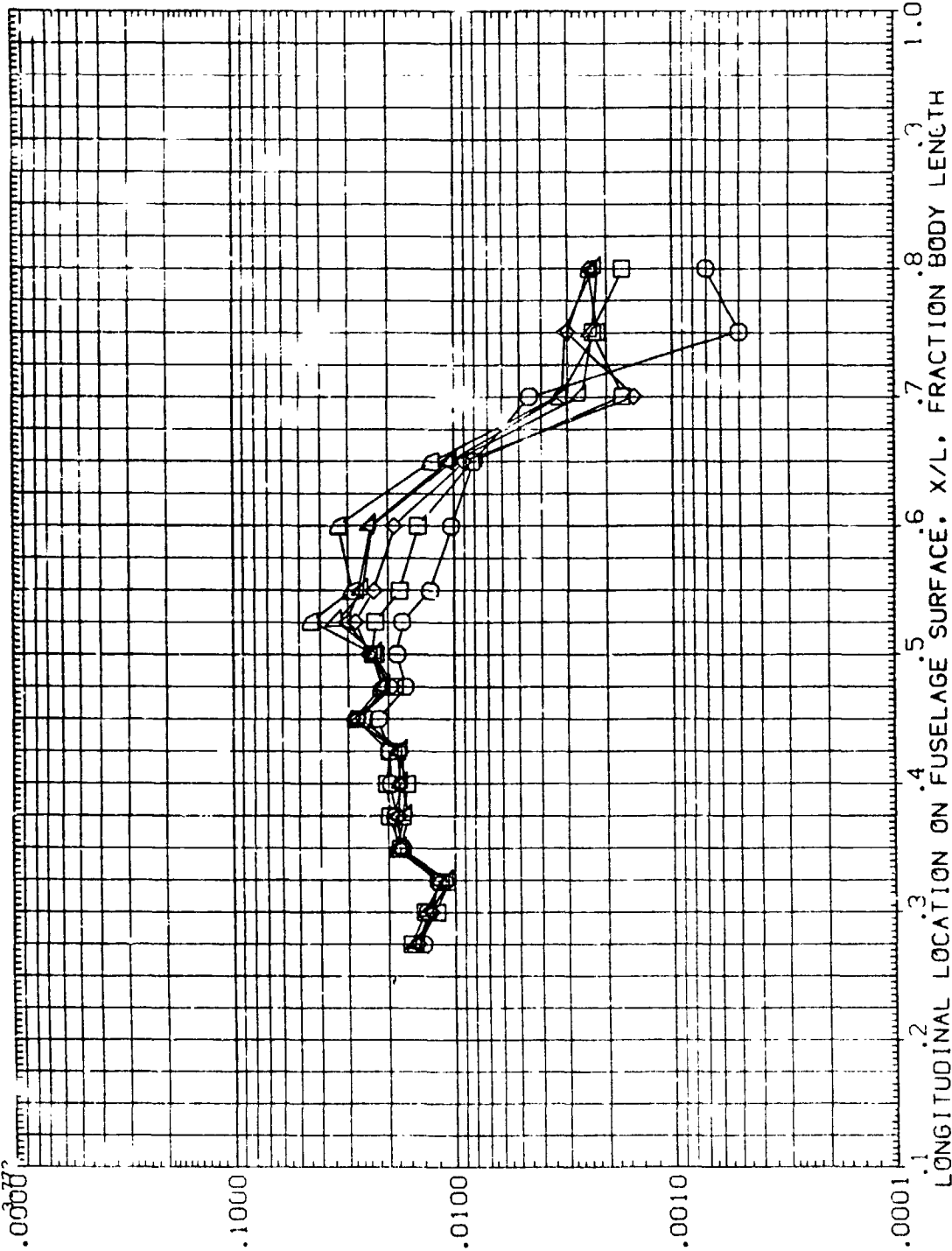


FIG. 4 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA = 0

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE ALPHA
 1.000 43.840

SYMBOL RN/L
 .467
 .951
 1.951
 2.471
 2.970
 1.00000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

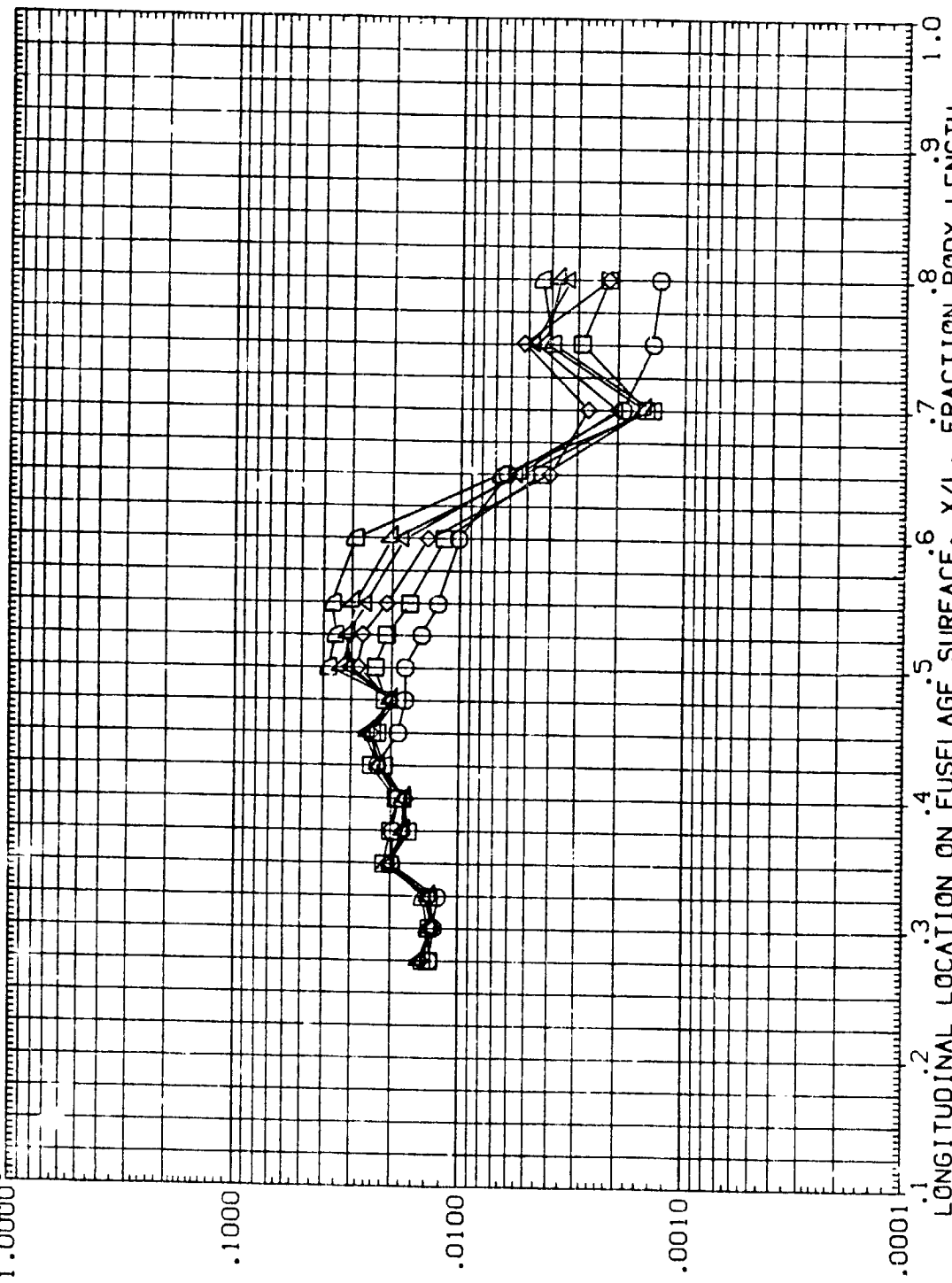


FIG. 4 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=0

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	RN/L	TRACE	ALPHA
□	.467	2.000	19.710
◇	.951		
▽	1.951		
△	2.471		
▽	3.773		

PARAMETRIC VALUES		
BETA	.000	8.000
ELEVON	.000	.000
RUDDER	.000	.000

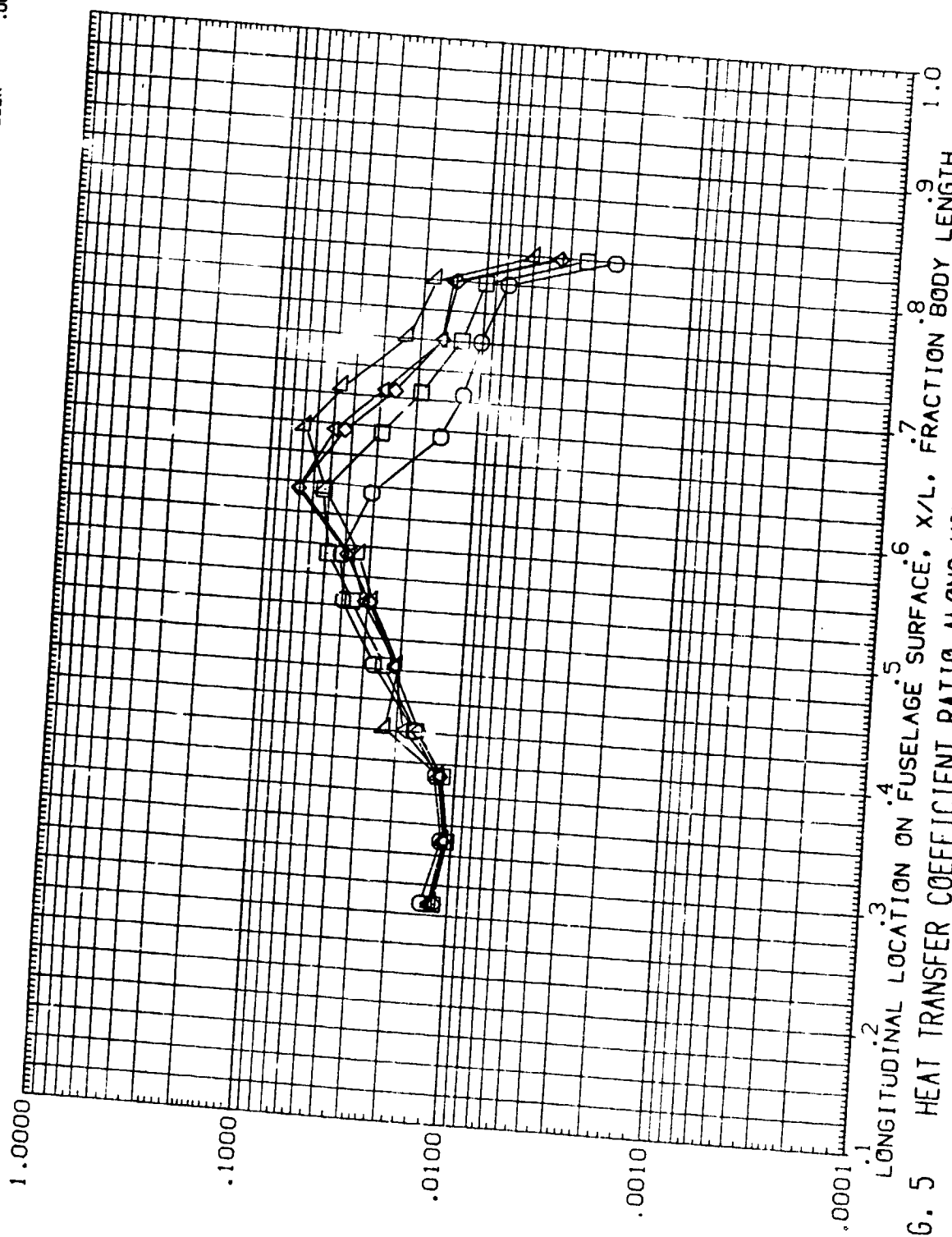


FIG. 5 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 0

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
O	2.970	2.000	20.030	.000	.000	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

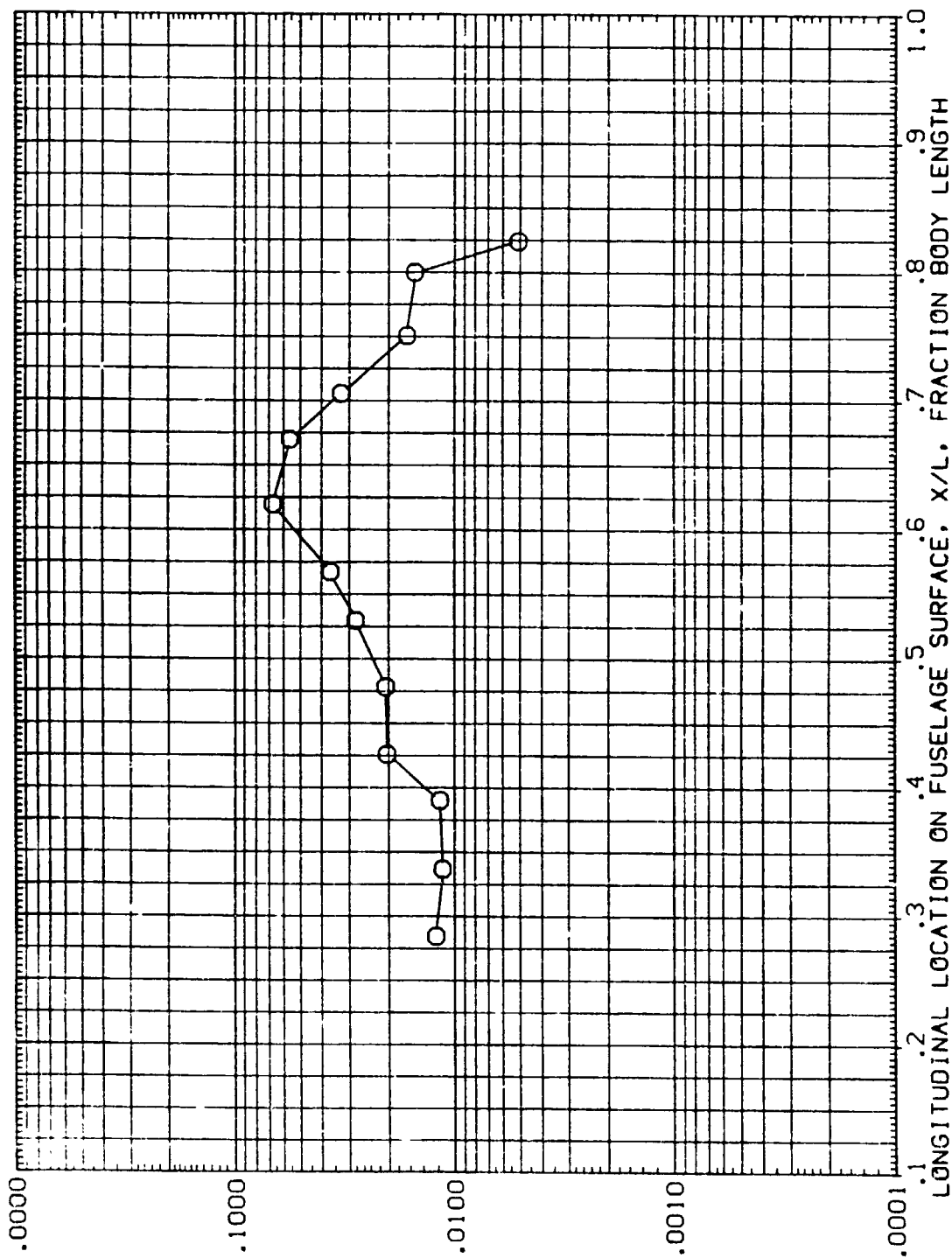


FIG. 5 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 0

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL RN/L
 □ .467
 ◇ .951
 △ 1.951
 ○ 2.471
 ○ 2.970

TRACE ALPHA
 2.000 24.830

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

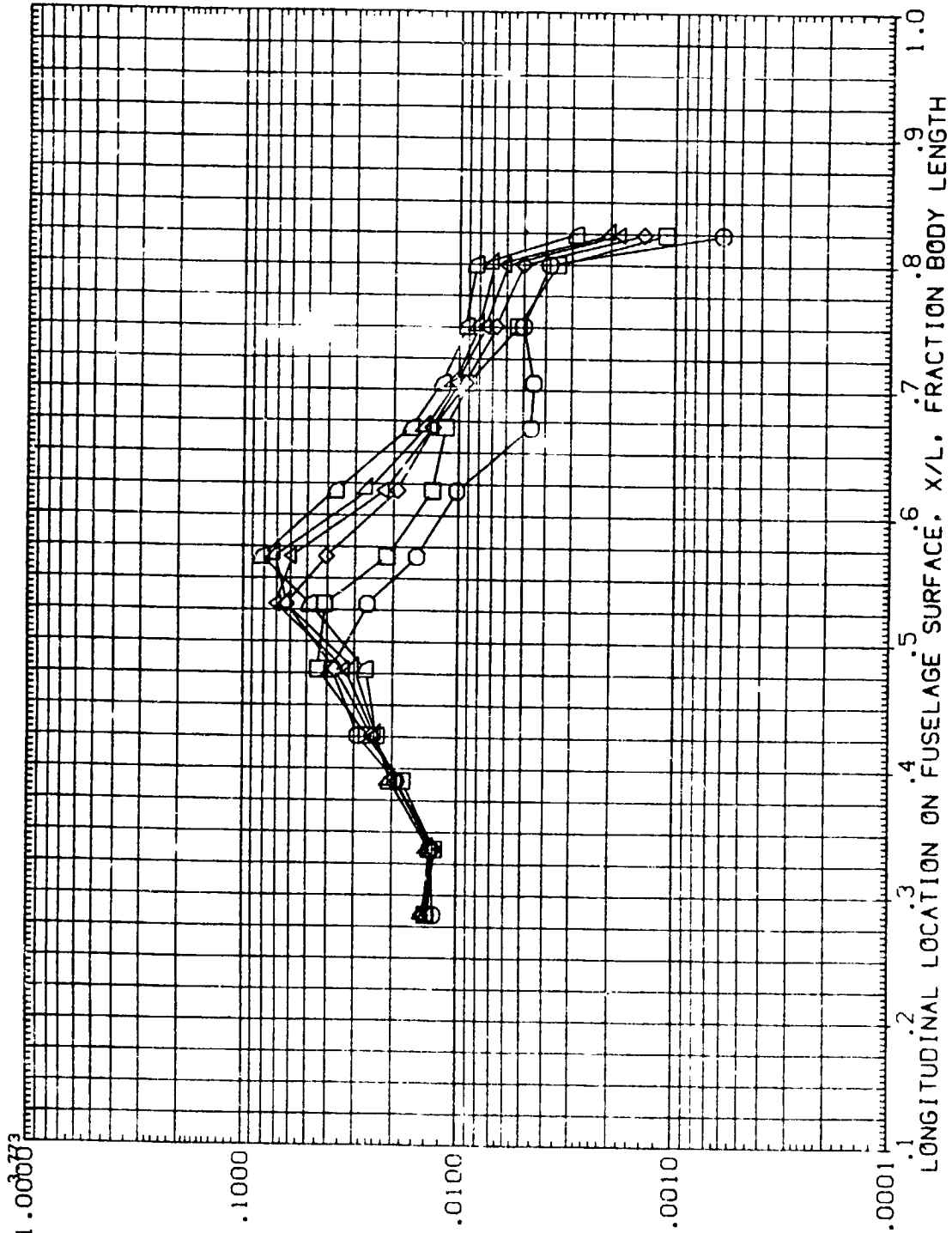


FIG. 5 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 0

011-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
 .000 MACH 8.000
 .000 RUDDER .000

BETA
 ELEVON

TRACE ALPHA
 2.000 29.770

RN/L
 .467
 .951
 1.951
 2.471
 2.970

SYMBOL
 □
 ◇
 △
 ○

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

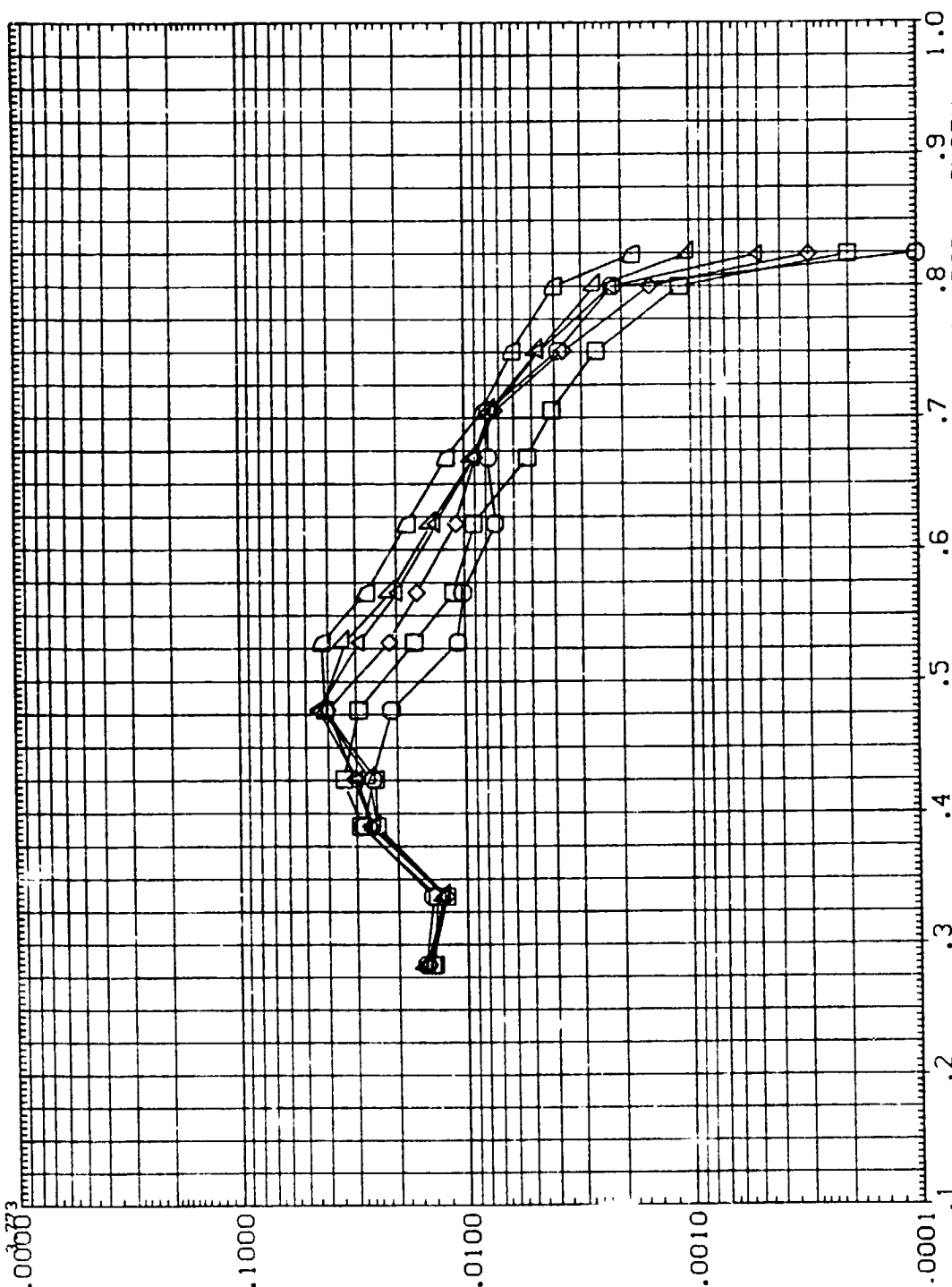


FIG. 5 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 0
 LONGITUDINAL LOCATION ON FUSELAGE SURFACE. X/L. FRACTION BODY LENGTH

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
BETA .000 MACH .000
ELEVON .000 RUDDER .000

TRACE ALPHA
2.000 34.760

SYMBOL RN/L
467 .951
1.951
2.471
2.97C
1.0000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

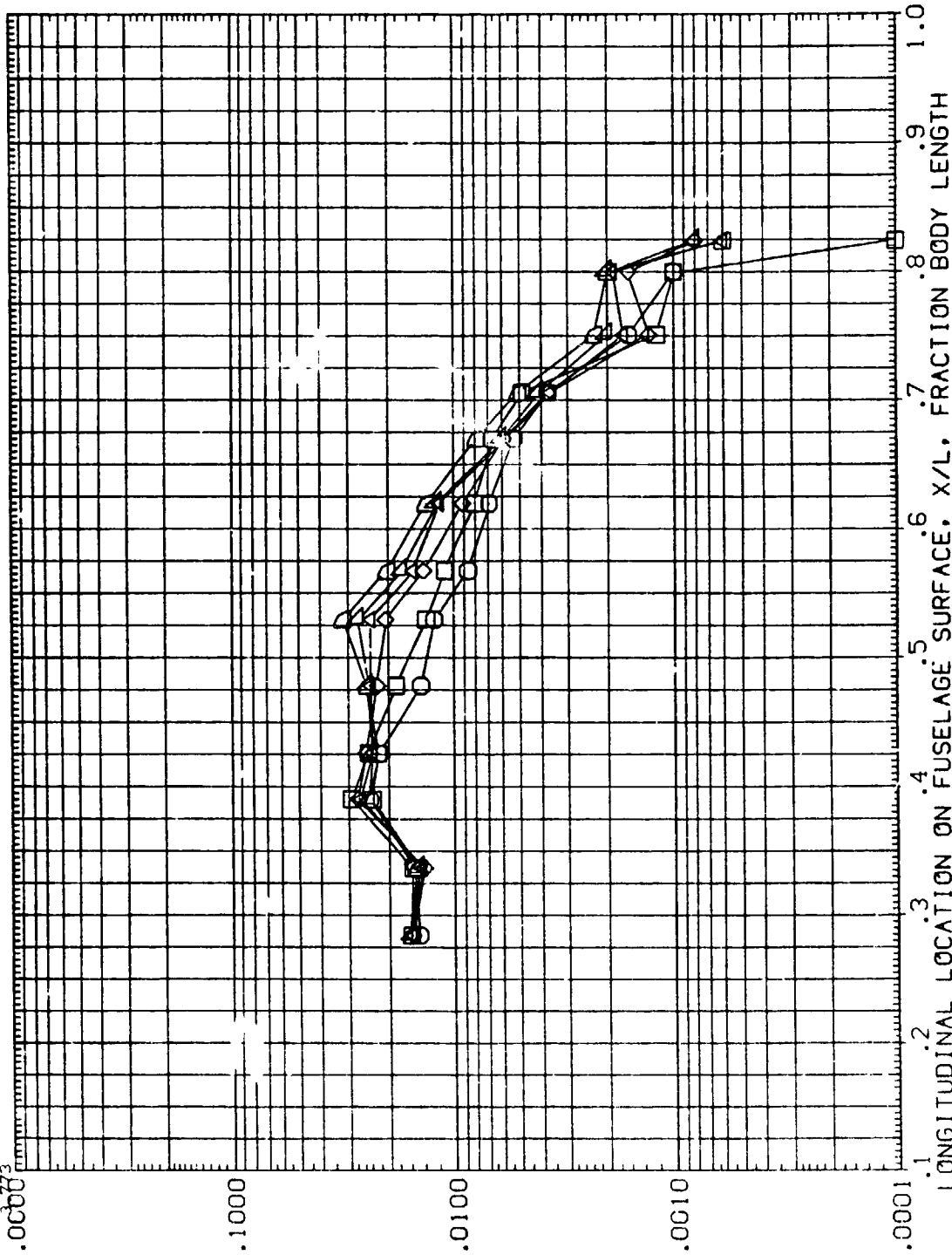


FIG. 5 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 0

CH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

SYMBOL RN/L TRACE ALPHA
 □ .467 2.000 39.790
 ○ .951
 △ 1.951
 ▽ 2.471
 ◇ 2.970

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

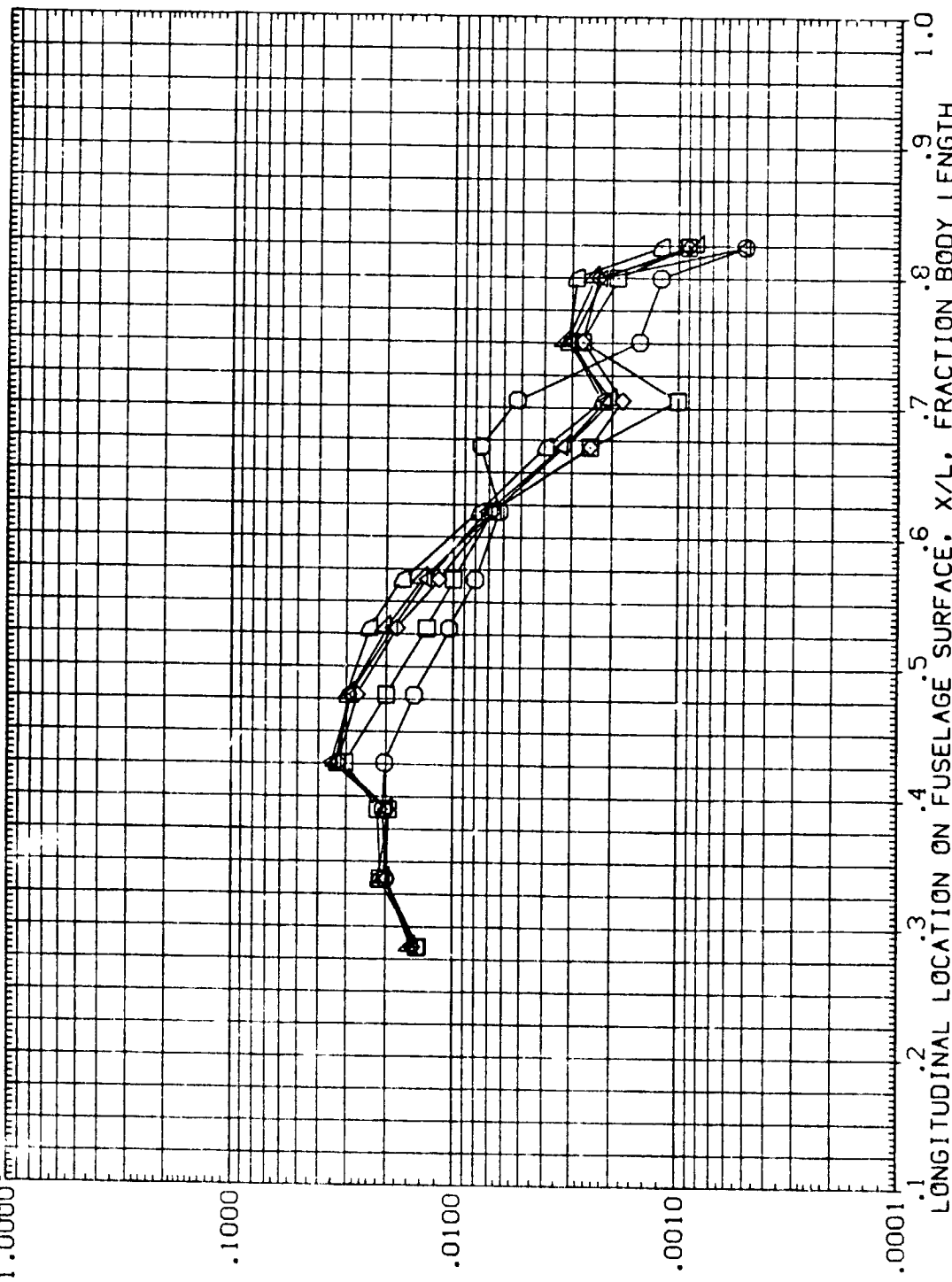


FIG. 5 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 0

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	RN/L	TRACE	ALPHA	BETA	PARAMETRIC VALUES
□	.467	2.000	43.840	.000	MACH
◇	.951			.000	RUDDER
◇	1.951				
◇	2.471				
◇	2.970				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

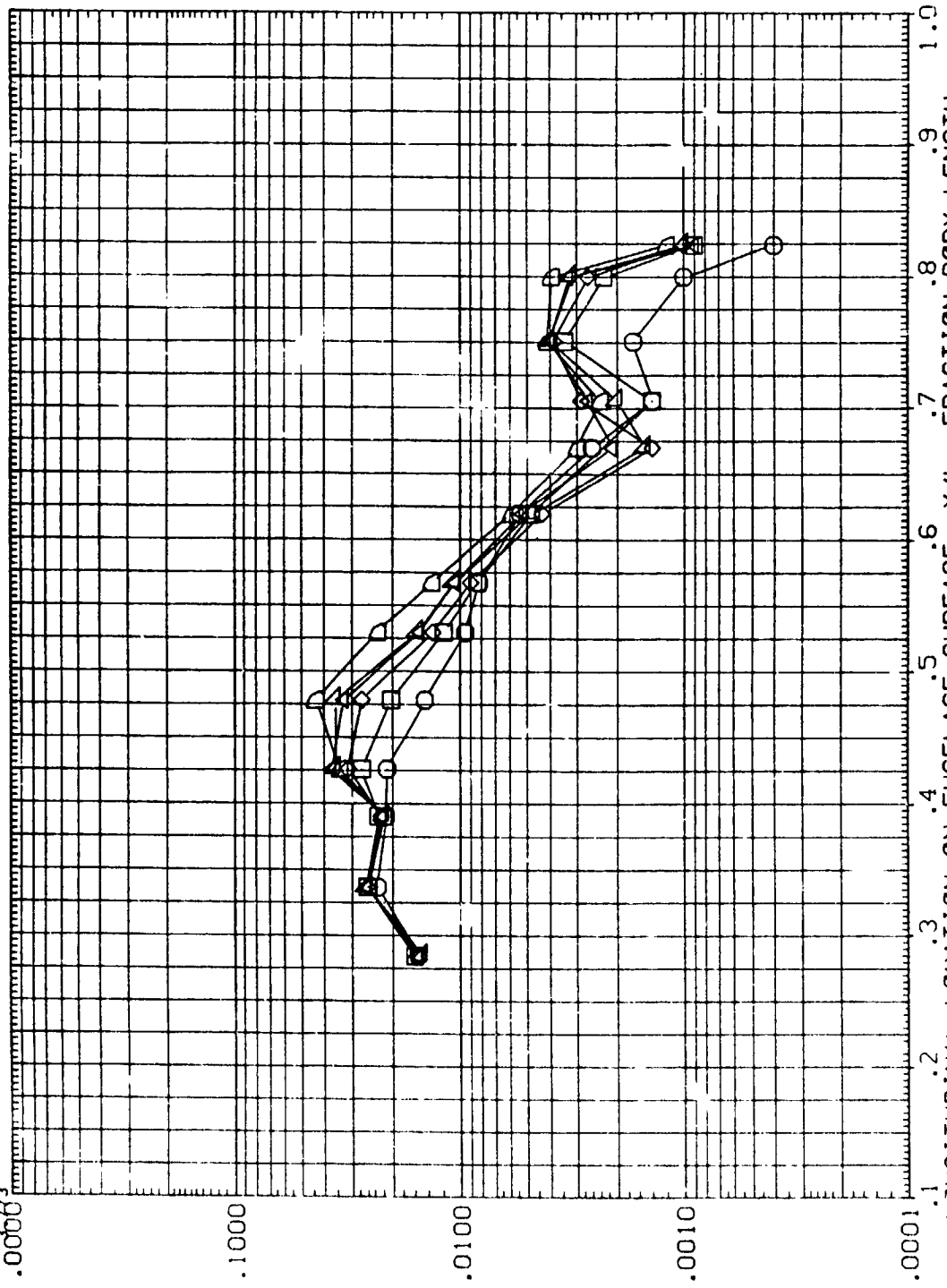
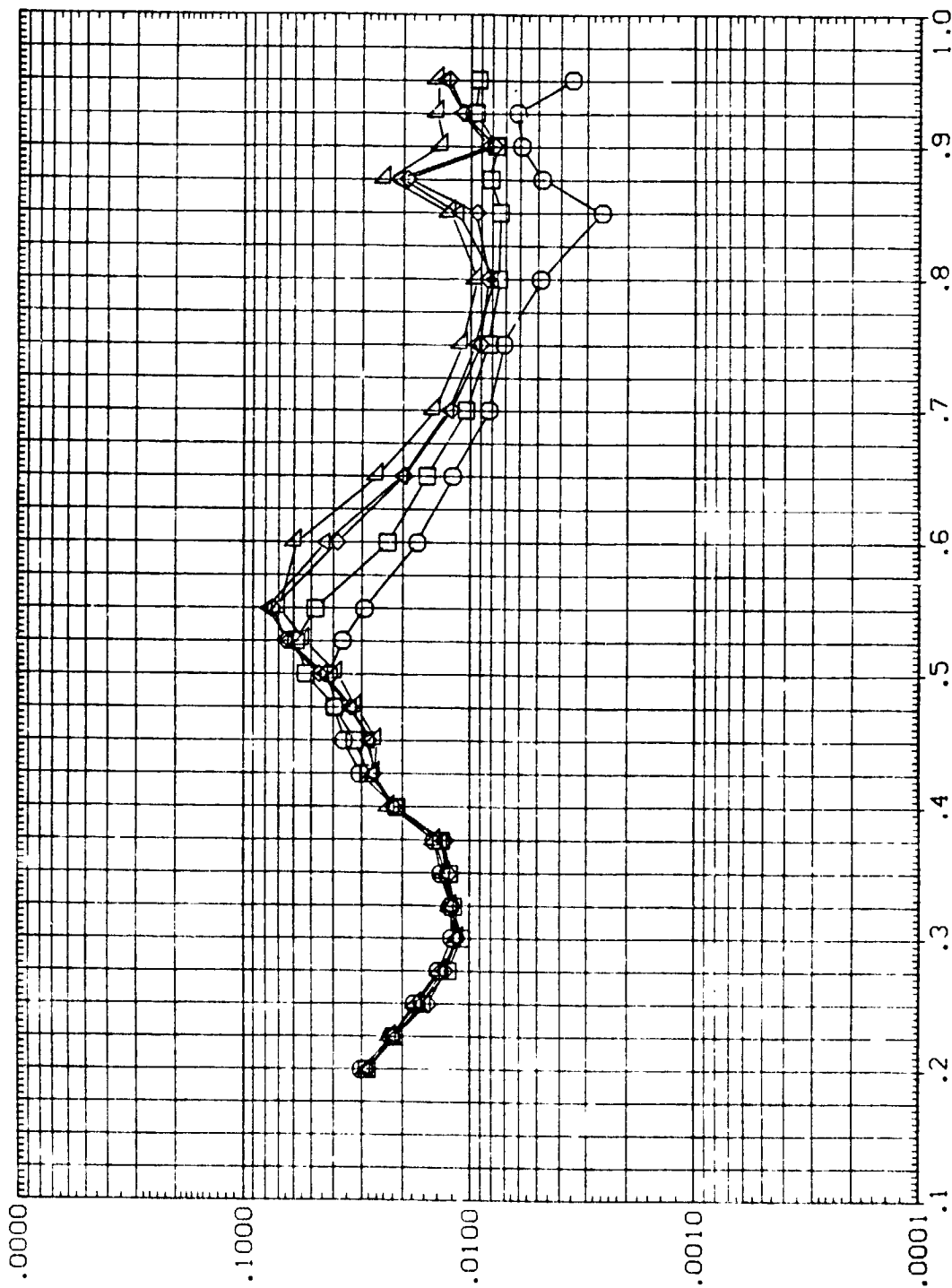


FIG. 5 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 0

011 74 (AEDC V41B-B8A) 862C12F10M16W127E52V8R19 (QVB001)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	8.000
○	.4	3.000	19.710	ELEVON	.000	RUDDER	.000
□	.951						
◇	1.951						
△	2.471						
▽	3.773						



MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/REF

FIG. 6 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 0

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL RN/L TRACE ALPHA
O 2.970 3.000 2° 030

PARAMETRIC VALUES
BETA .000 MACH .000
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

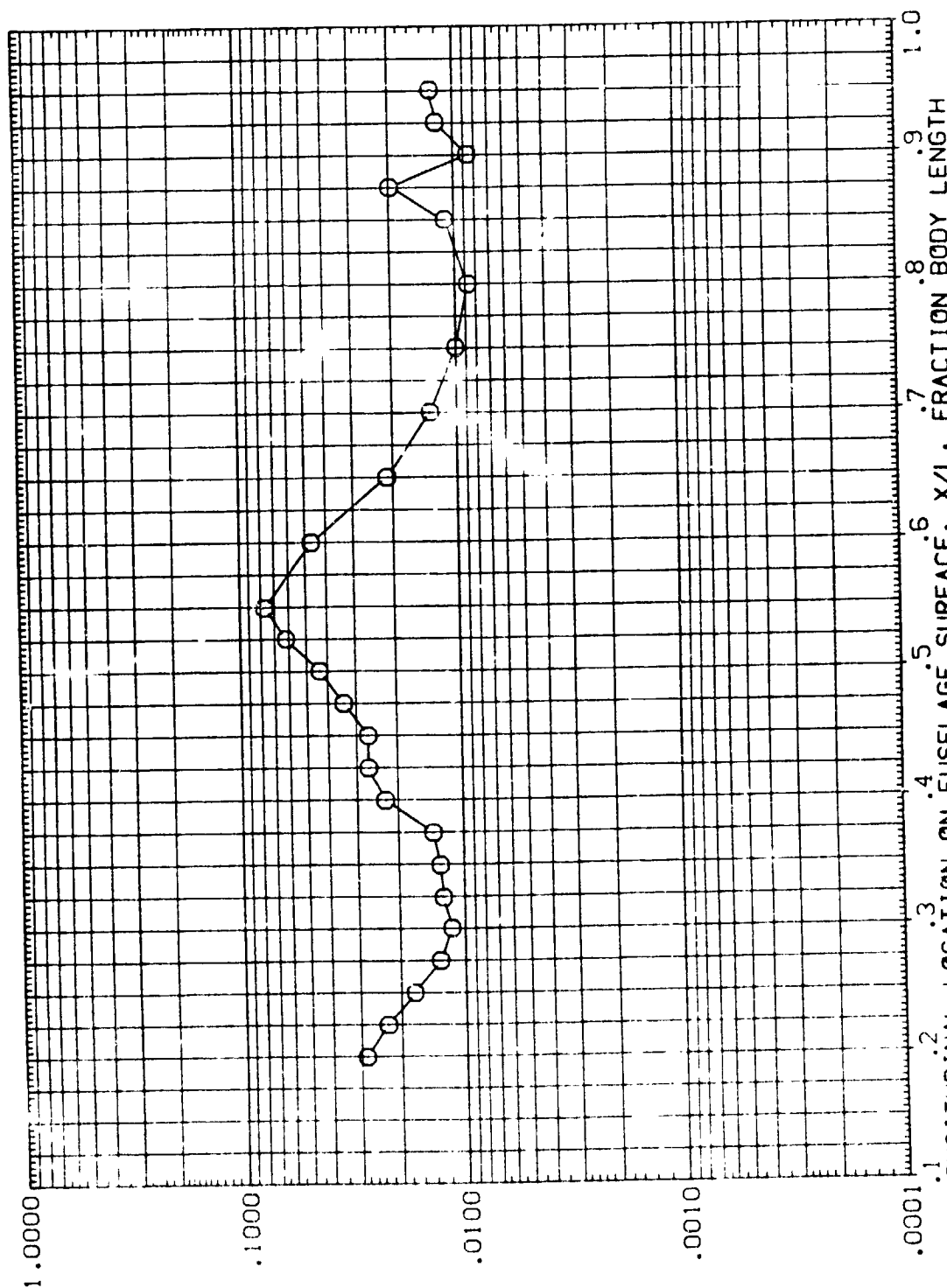


FIG. 6 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 0

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
 BETA .000 MACH .000
 ELEVON .000 RUDDER .000

TRACE 3.000 ALPHA 24.830

SYMBOL
 1.0000
 .951
 1.951
 2.471
 2.970
 3.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, 9H/HREF

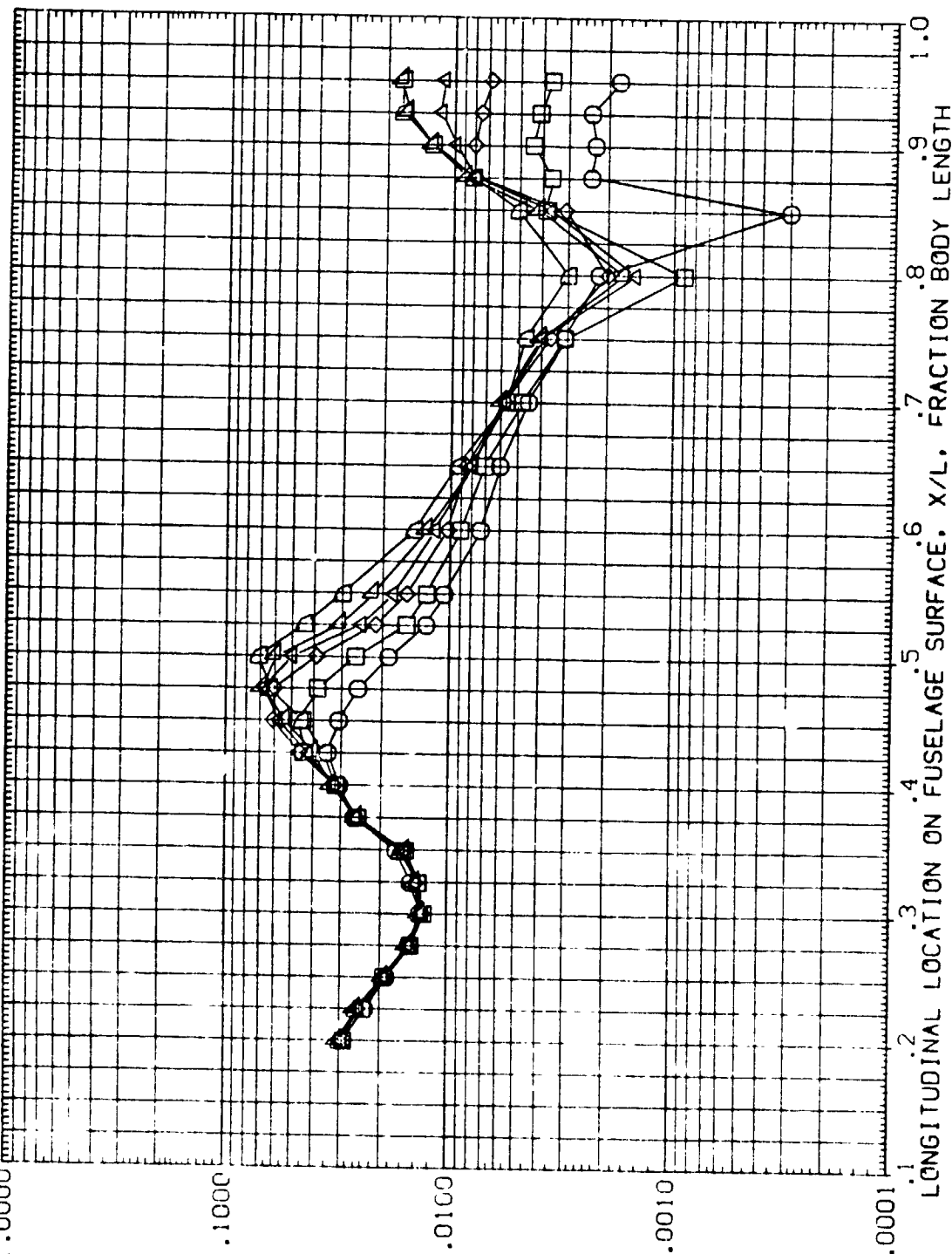


FIG. 6 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 0

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL RN/L TRACE ALPHA

PARAMETRIC VALUES
BETA .000 MACH 8.000
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

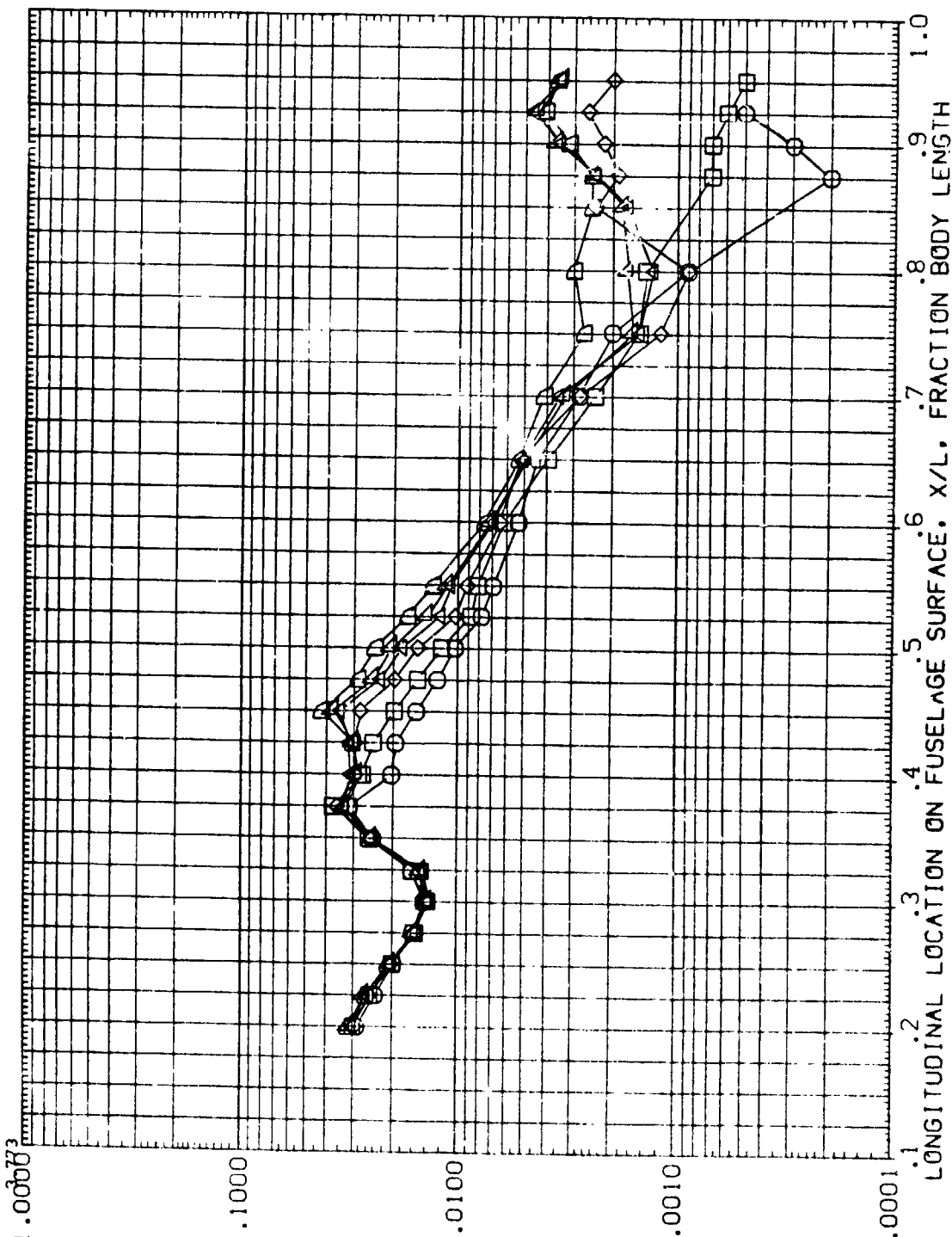


FIG. 6 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 0

CH-71 (AEDC 11B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

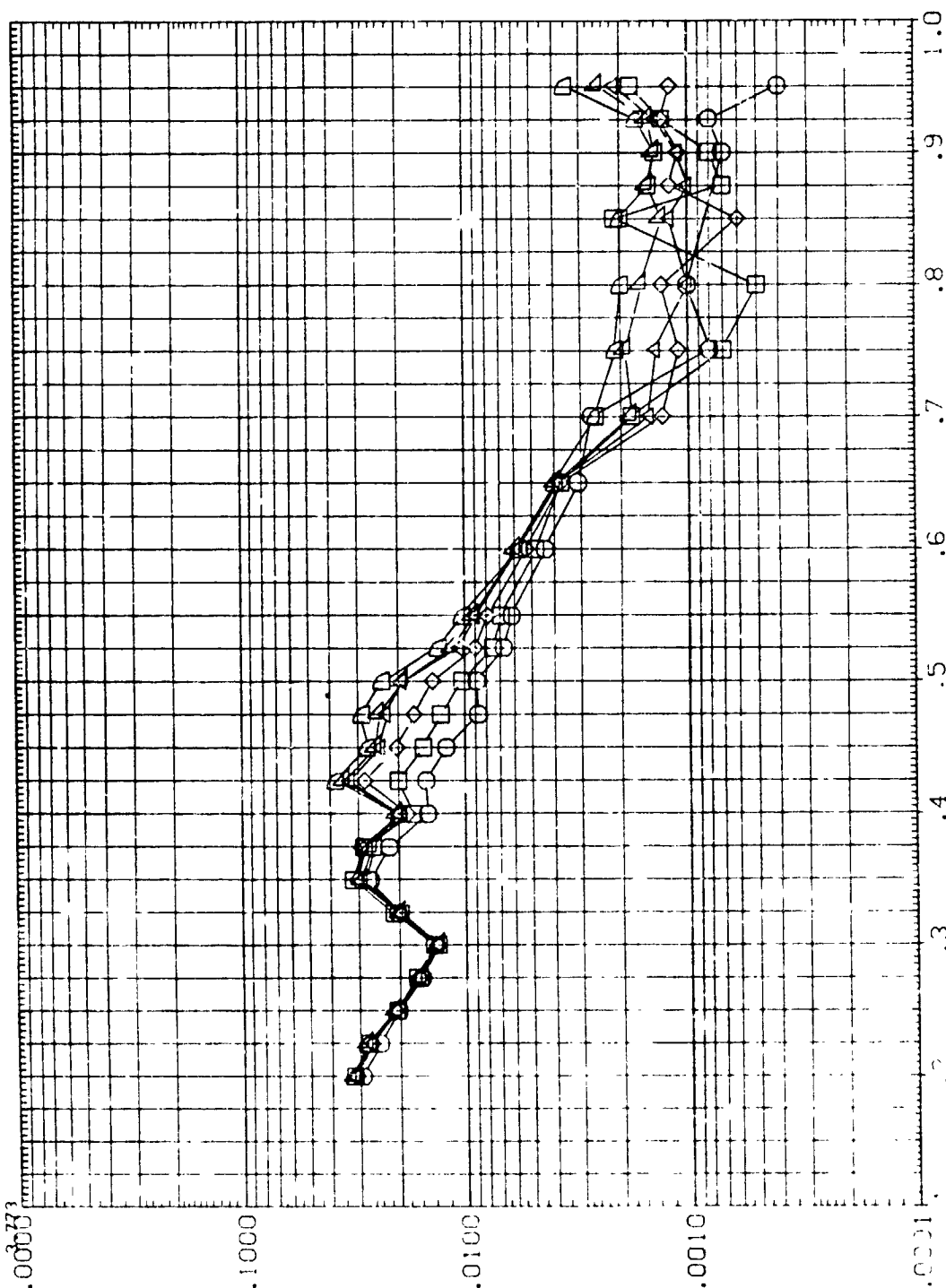
PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE 3.000 ALTITUDE 34.760

W/L .467
 .951
 1.951
 2.471
 2.970

SYMBOL
 ○
 ◇
 □
 △

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF



LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH

FIG. 6 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 0

PARAMETRIC VALUES
 BETA .000 HACK .000
 LLEVON .000 RUDDER .000

SYMBOL PR/L TRACE ALPHA
 .467 3.000 39.7°
 .951
 1.951
 2.471
 2.970

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

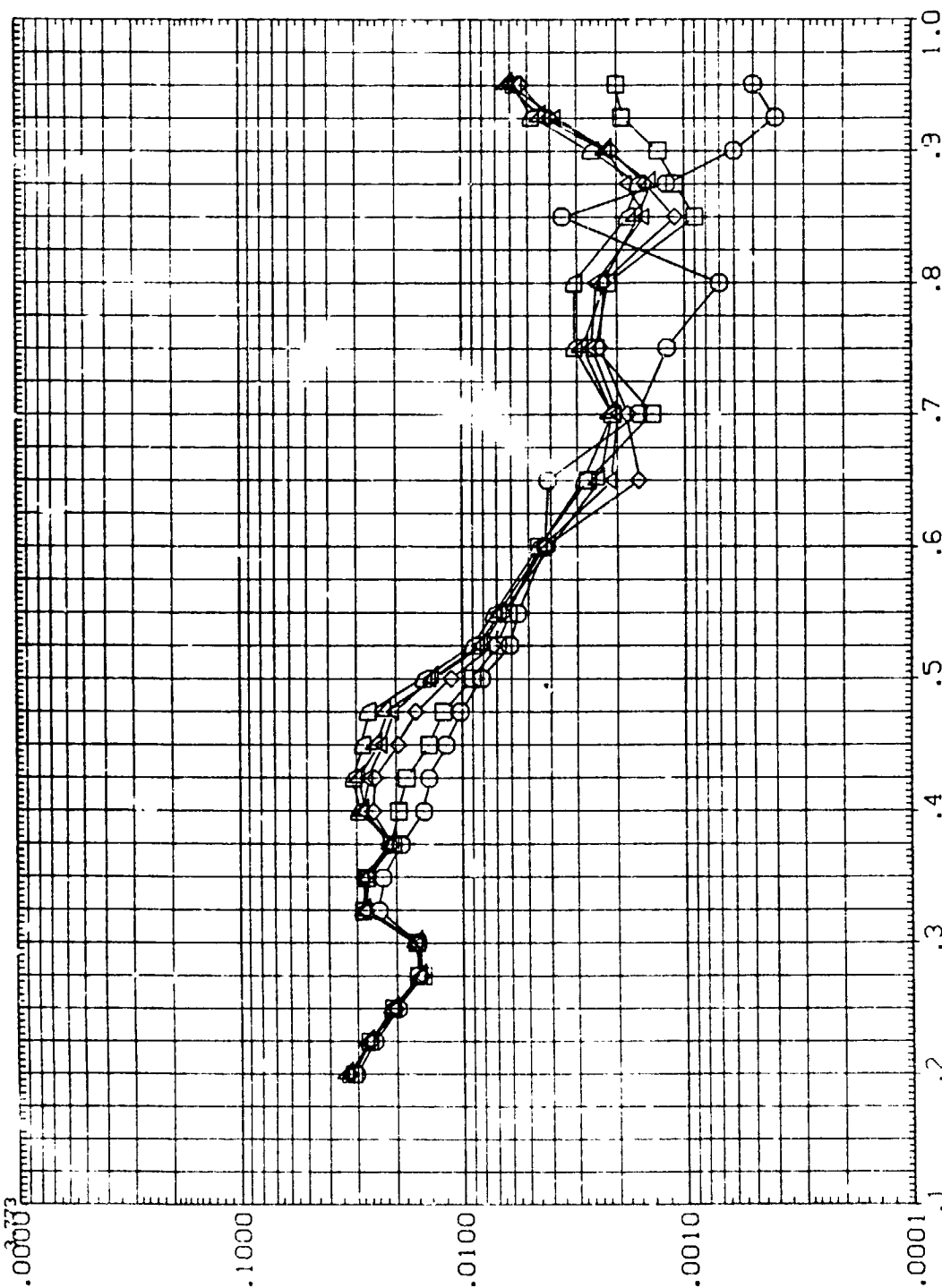


FIG. 6 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 0

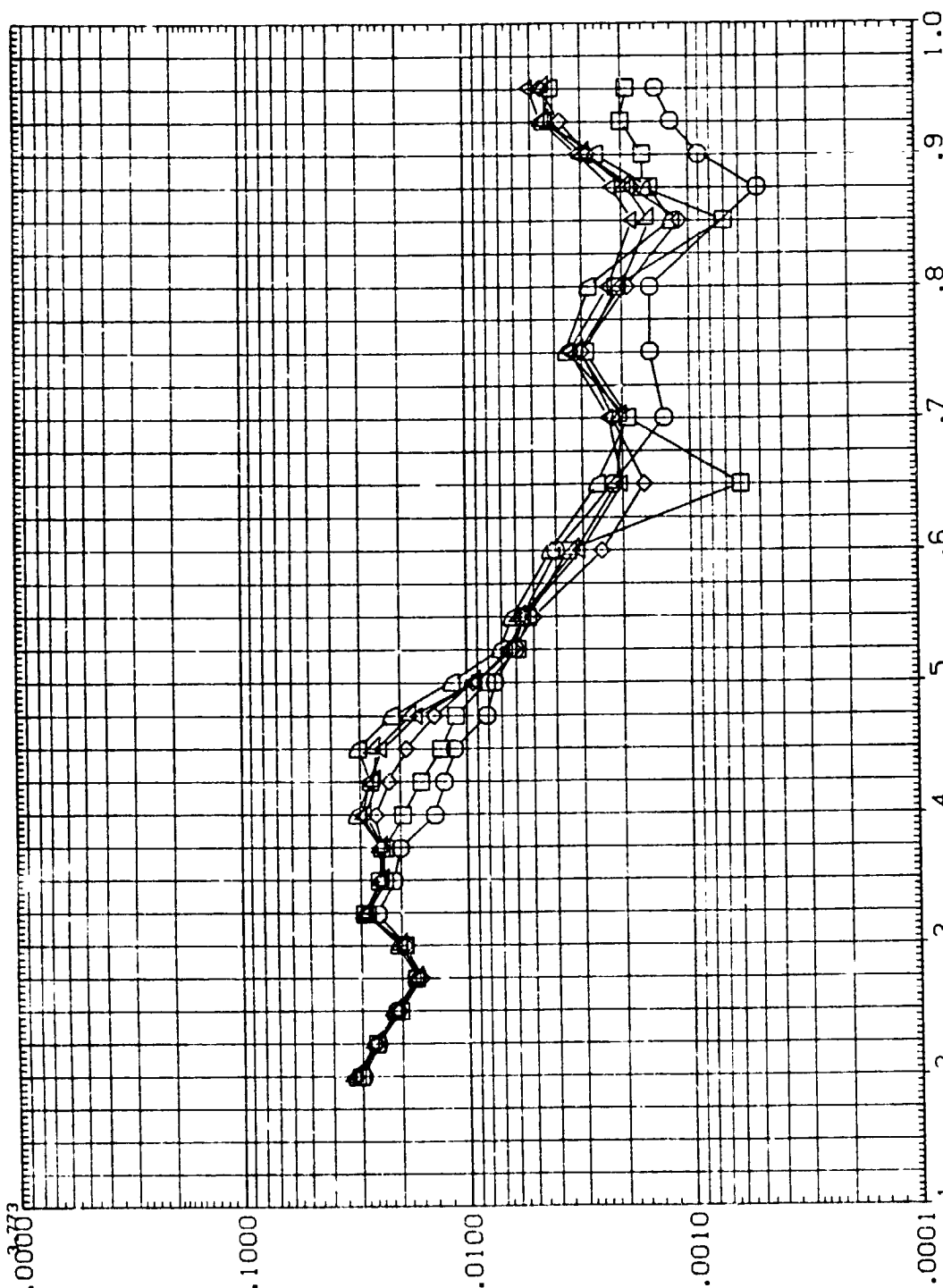
CH-74 (AEDC 1B-98A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
BETA .000 MACH .000
ELEVON .000 RUDDER .000

TRACE ALPHA
3.000 43.840

SYMBOL RN/L
◇ .467
◇ .951
◇ 1.951
◇ 2.471
◇ 2.970

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF



LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L. FRACTION BODY LENGTH

FIG. 6 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 0

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
◇	.467	4.000	19.710	.000	.000	.000	
◇	.951						
◇	1.951						
◇	2.471						
◇	3.773						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

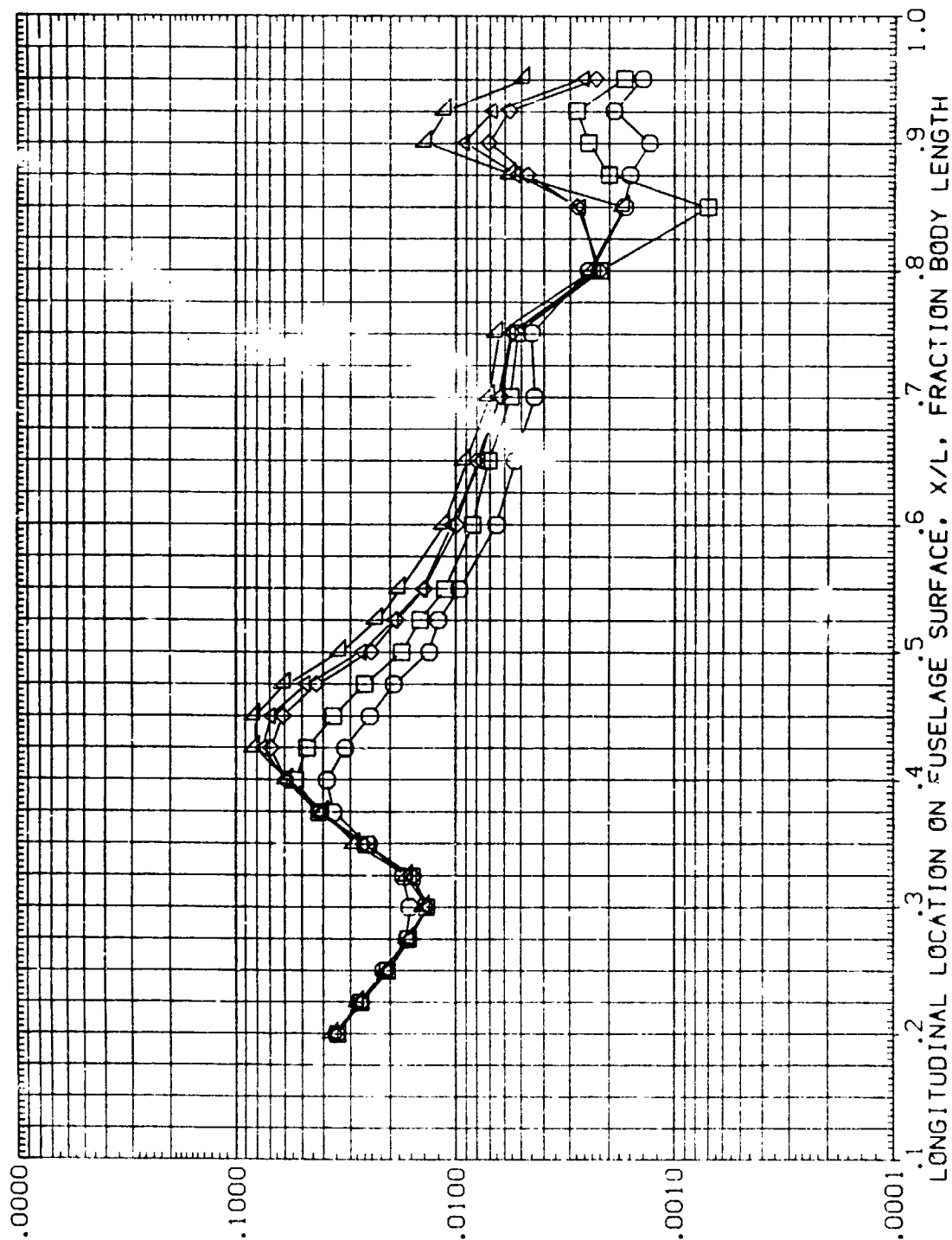


FIG. 7 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 0

OH-74 (AFDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL O RH/L 2.970 TRACE 4.000 ALPHA 20.030

PARAMETRIC VALUES
BETA .000 MACH 8.000
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

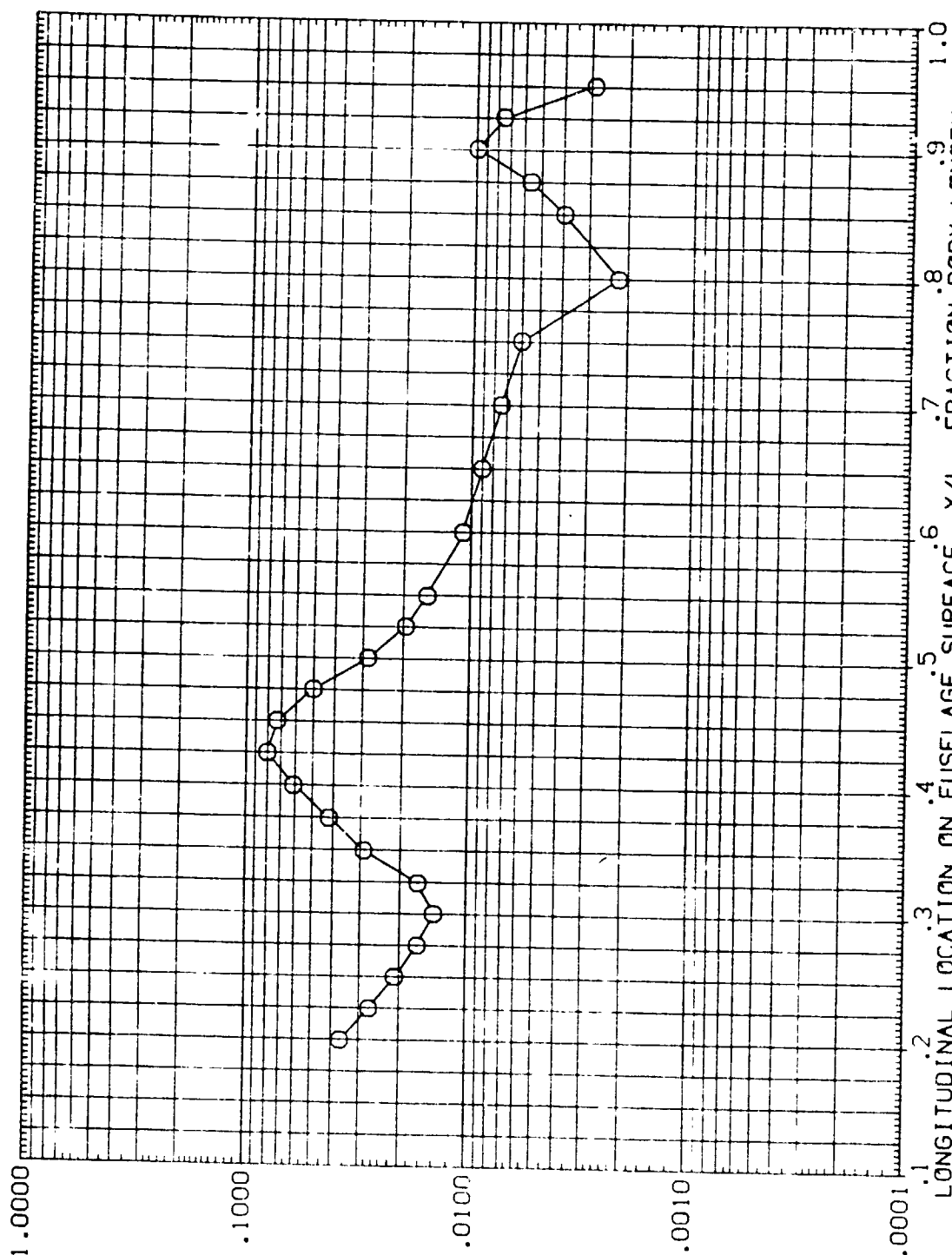


FIG. 7 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 0

PARAMETRIC VALUES
 .000 MACH 8.000
 .000 RUDDER .000

BETA
 ELEVON

TRACE ALPHA
 4.000 24.830

F I/L
 .467
 .951
 1.951
 2.471
 2.970

SYMBOL
 ▽
 ▴
 ◇
 □
 ○

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

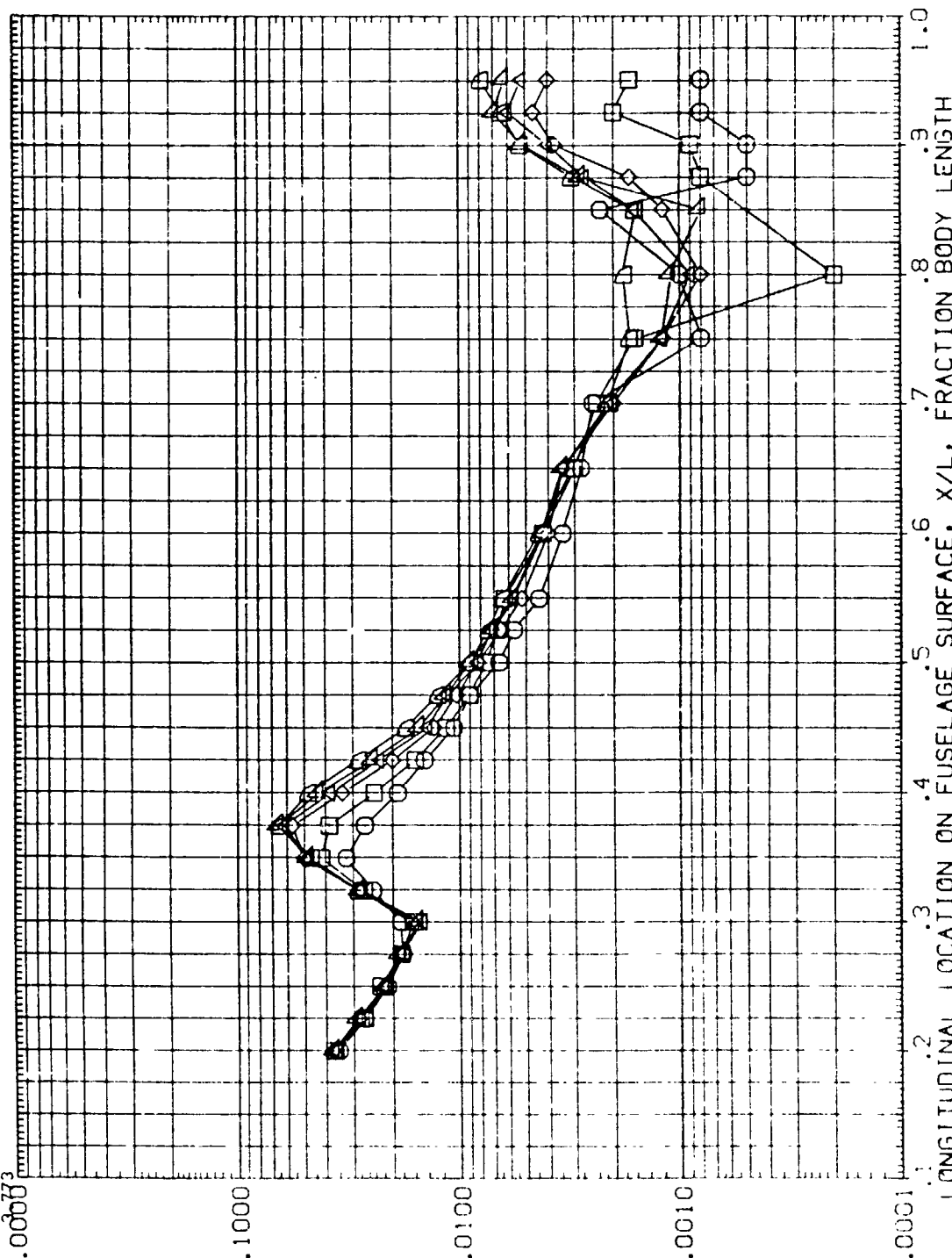


FIG. 7 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 0

011-74 (ALUC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES	
BETA	MACH
ELEVON	RUDDER
.000	.000
.000	.000

SYMBOL	TRACE	ALPHA
□	4.000	9.170
◇	0.7	
△	0.51	
▽	1.951	
◇	2.471	
△	2.970	

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

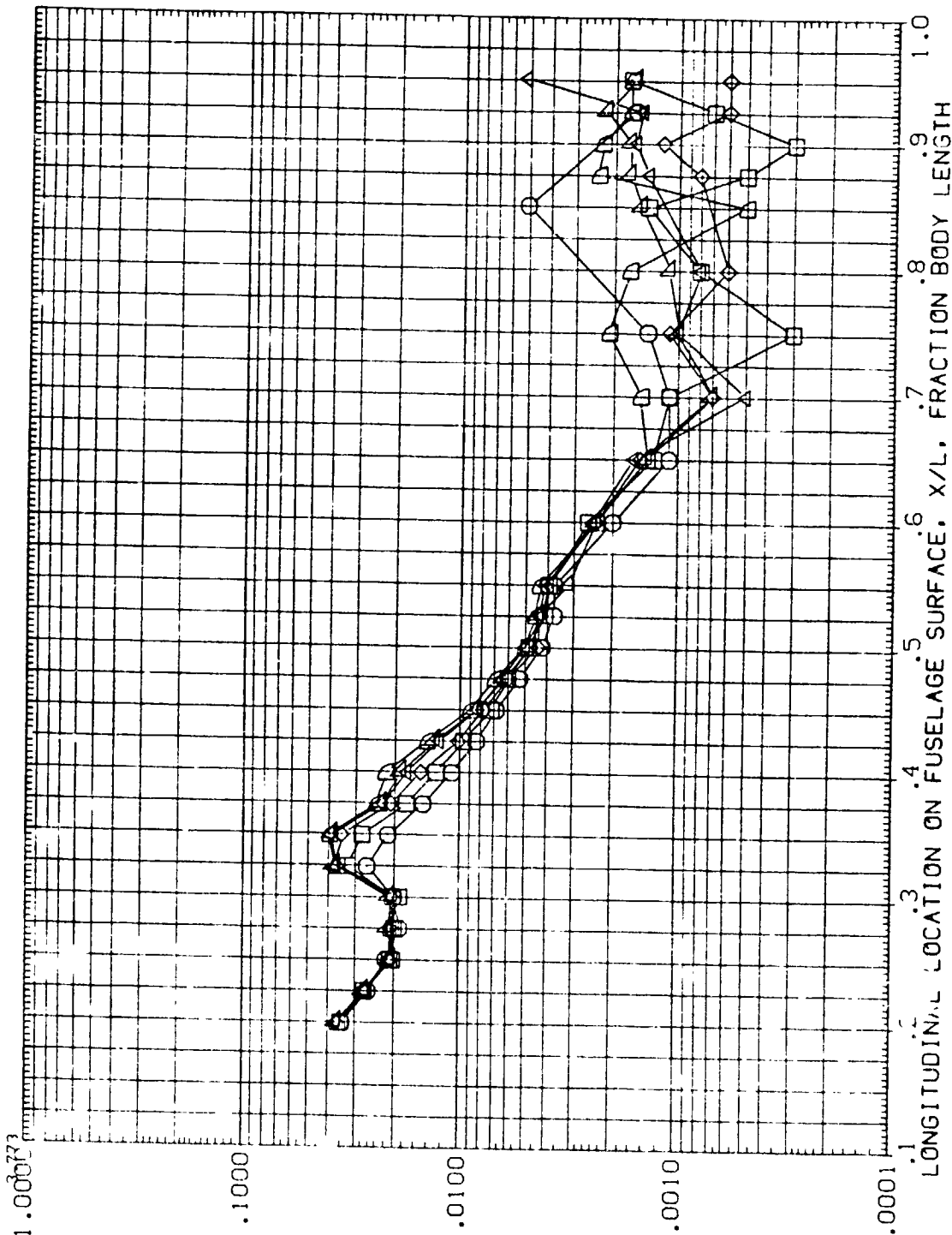


FIG. 7 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH
HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 0

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	RN/L	TRACE	ALPHA
□	.467	4.000	34.760
◇	.951		
△	1.951		
▽	2.471		
○	2.970		

PARAMETRIC VALUES			
BETA	MACH	RUDDER	
.000	.000	.000	8.000
.000	.000	.000	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

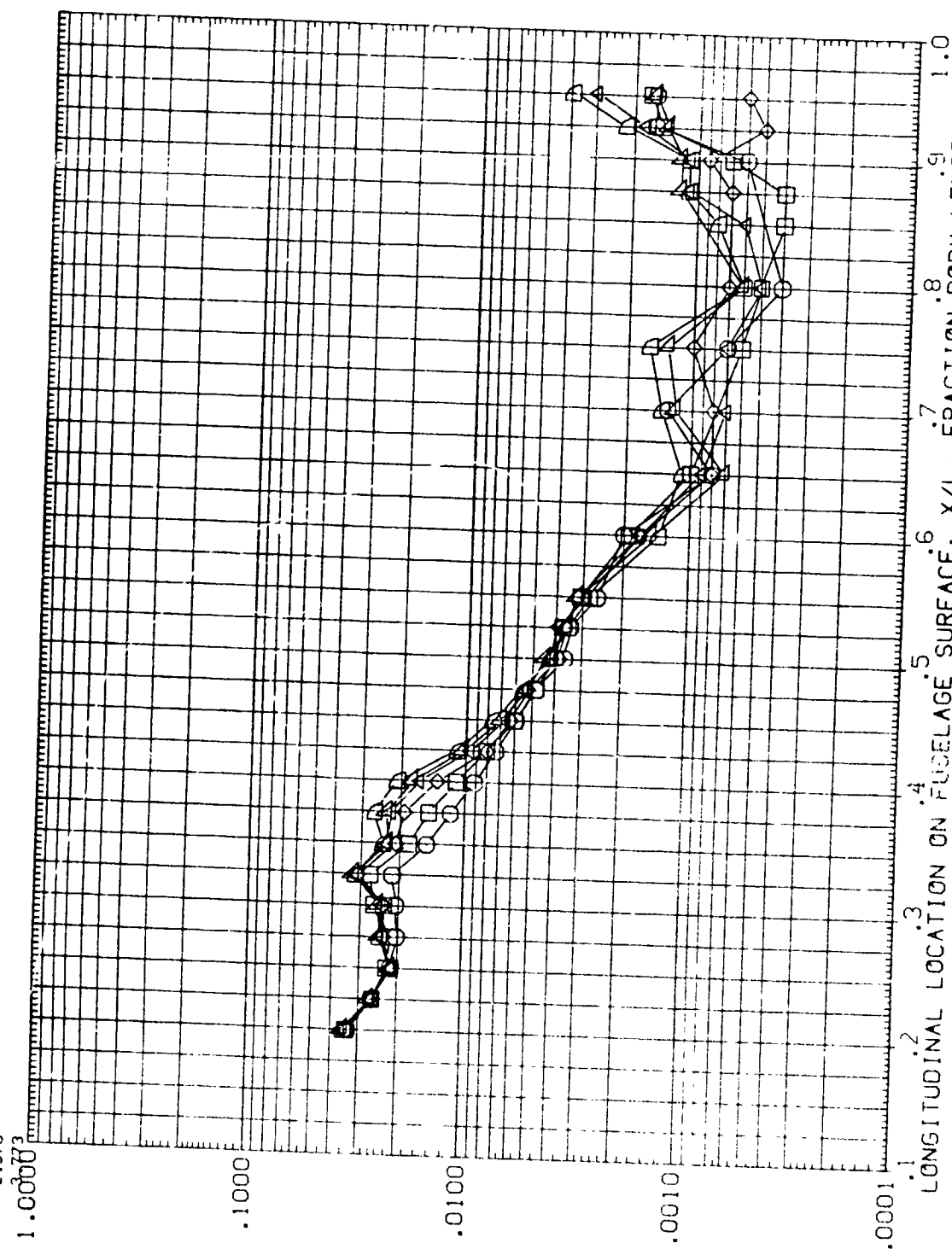


FIG. 7 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L. FRACTION BODY LENGTH
HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 0

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL R/H/L TRACE ALT/HA
 1.0000
 .467
 .951
 1.51
 2.41
 2.970

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

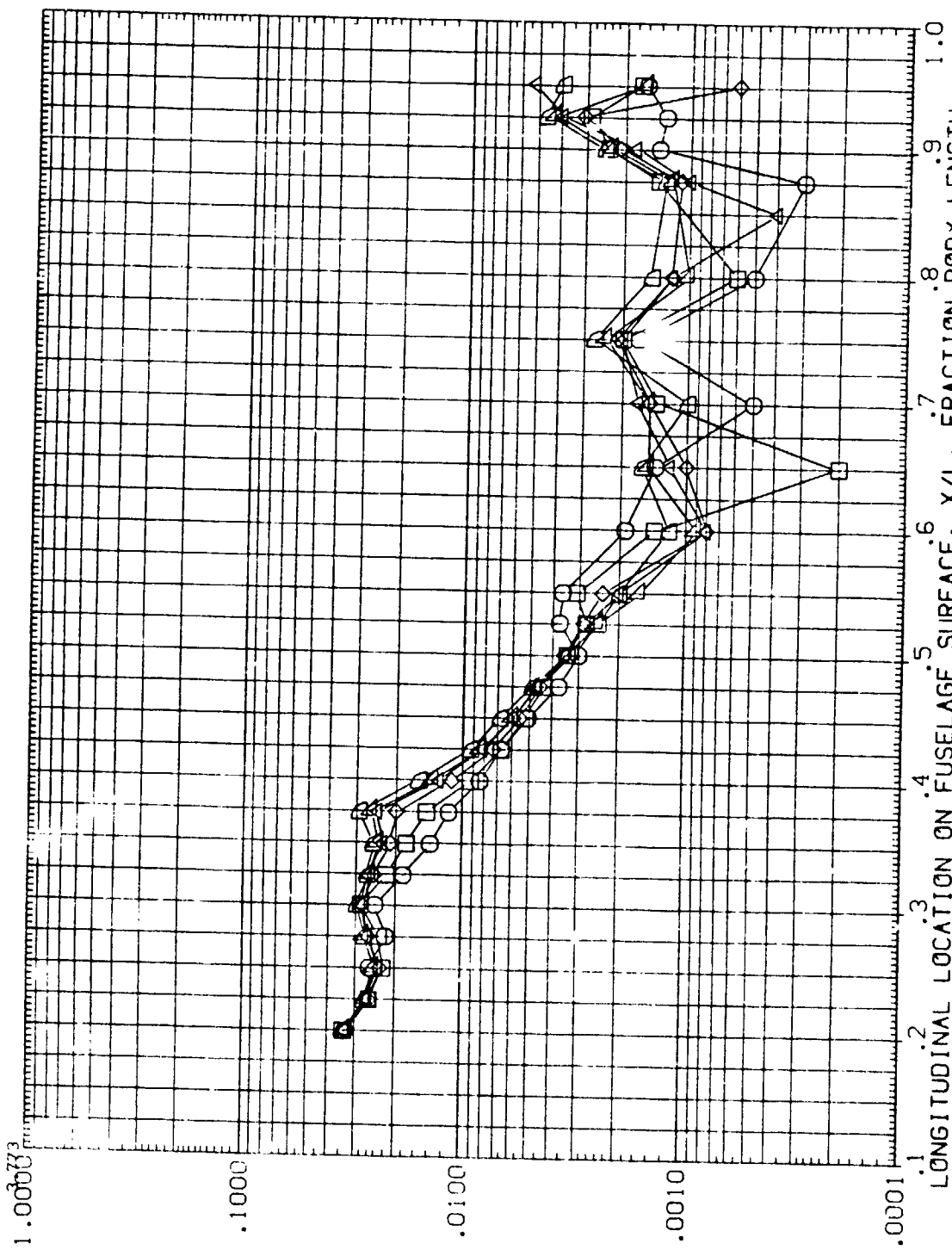
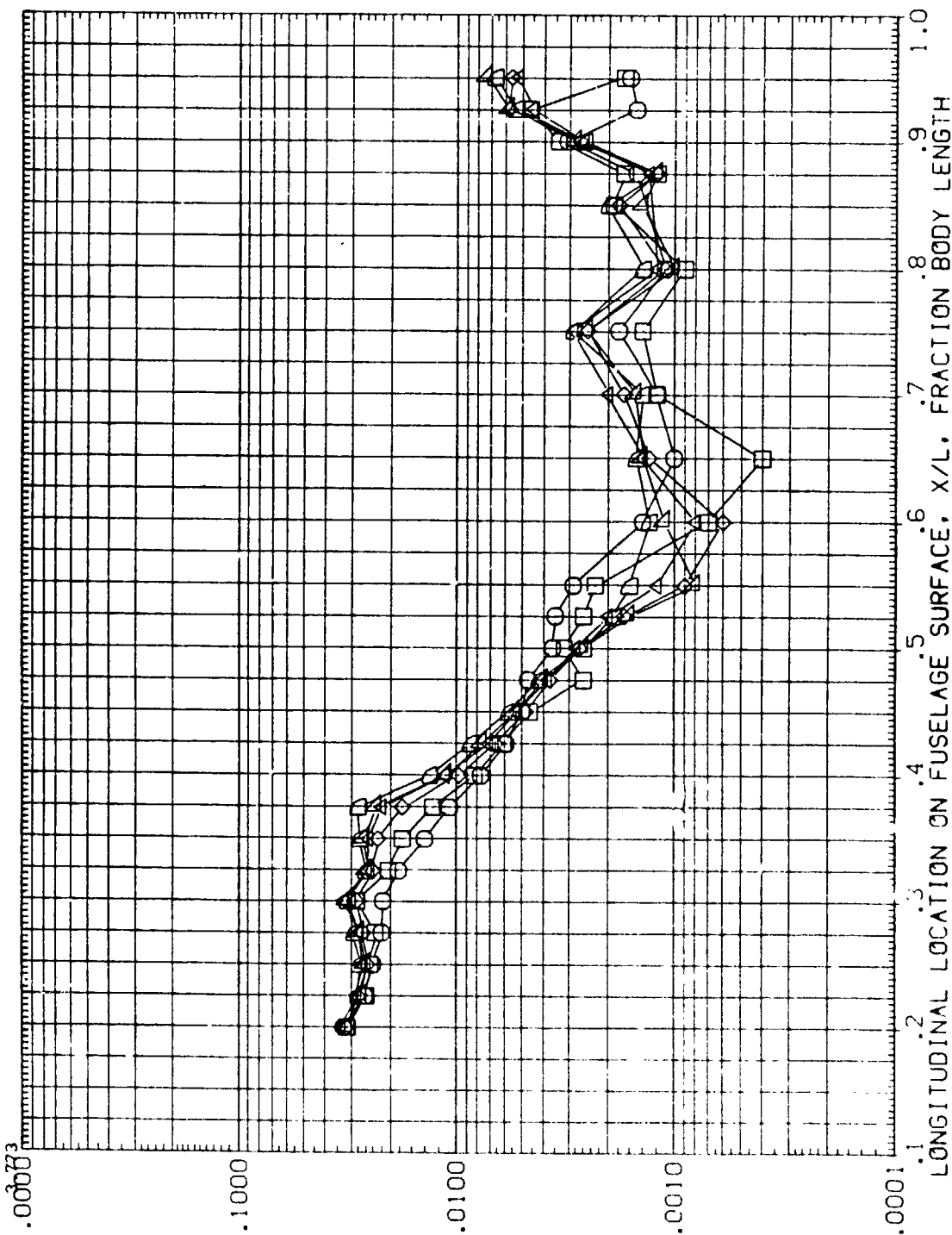


FIG. 7 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH
 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 0

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE ALPHA
 4.000 43.840

SYMBOL RN/L
 .467
 .951
 1.951
 2.471
 2.970



MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, h/h_{REF}

FIG. 7 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH
 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 0

CH-74 (AEDC V410 38A) B62C12F10M16W127E52V8R19 (QVB002)

SYMBOL

RV/L
TRACE ALPHA
1.000 19.830

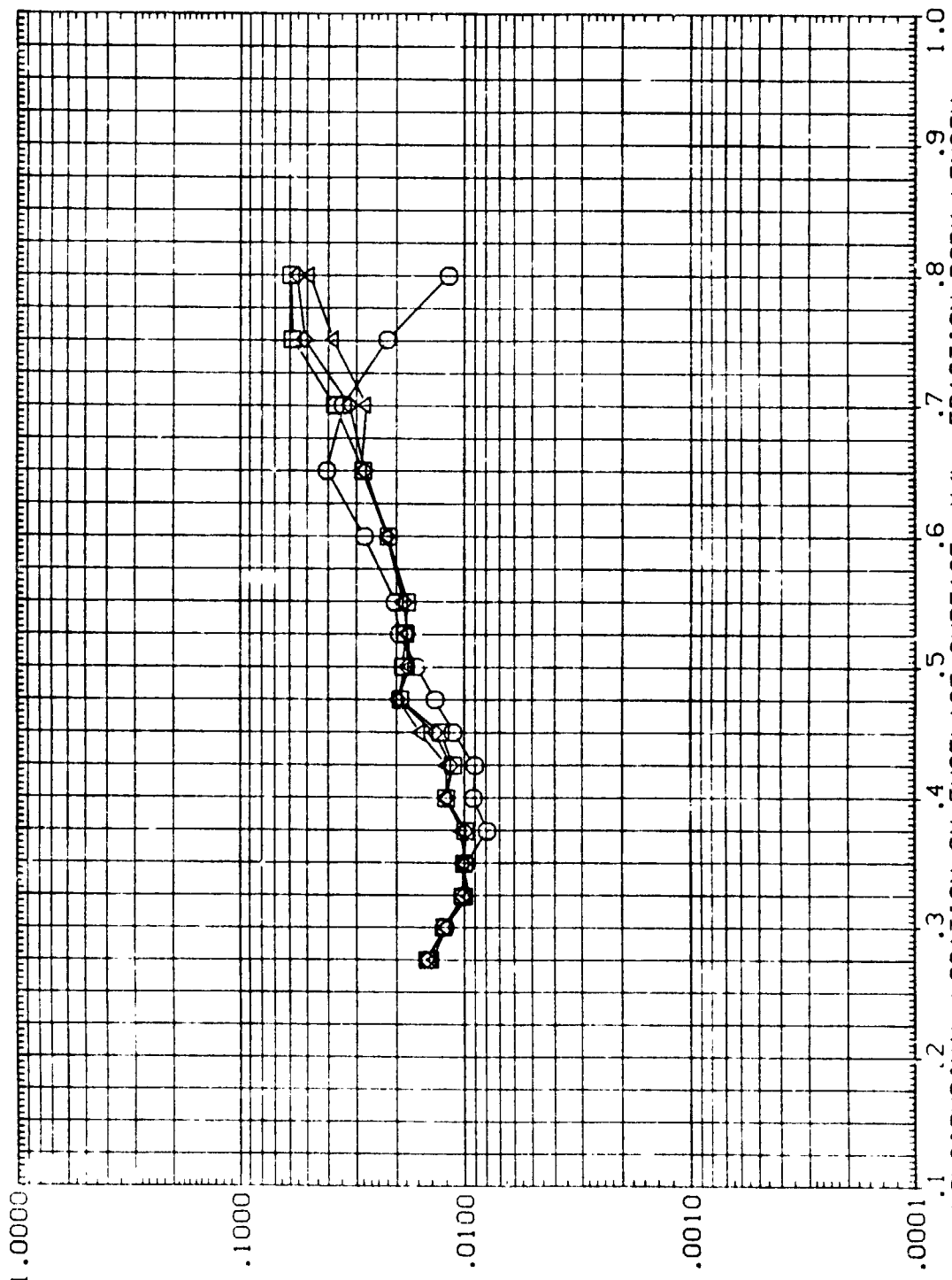
PARAMETRIC VALUES
BETA
ELEVON

1.000
.000

MACH
R/DODER

8.000
.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF



LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH

FIG. 8 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=1

QH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB002)

PARAMETRIC VALUES
 BETA 1.000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE ALPHA
 1.000 24.800

SYMBOL RN/L
 ○ 2.483
 □ 2.966
 △ 3.747

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

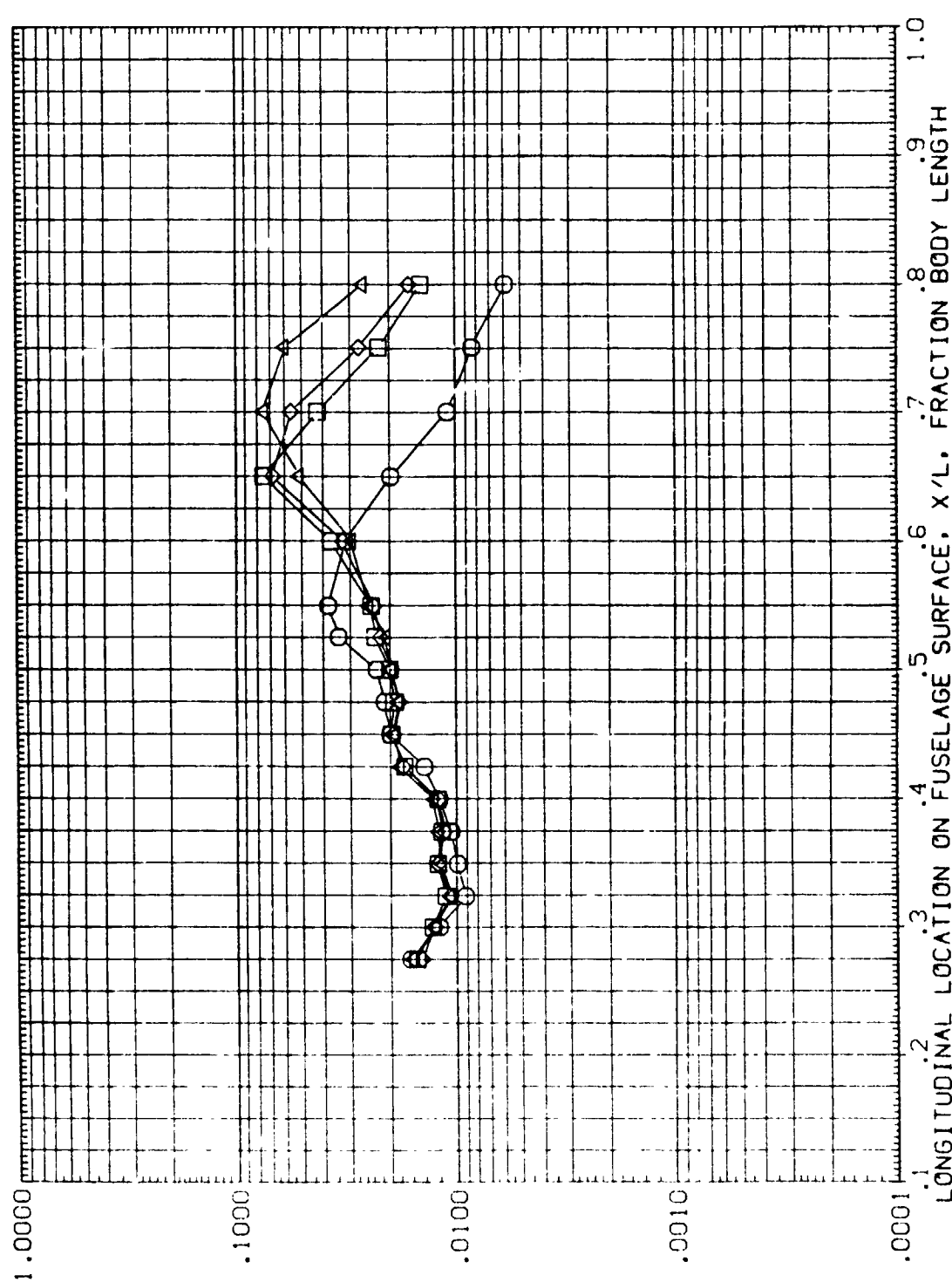


FIG. 8 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA = 1

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB0002)

PARAMETRIC VALUES
 BETA 1.000 MACH 8.000
 ELEVON .000 RUDDER .000

IRACE 1.000 ALPHA 29.830

SYMBOL RN/L
 □ .451
 ◇ 1.442
 △ 1.957
 ○ 2.483
 ◊ 2.966
 ◻ 2.966

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

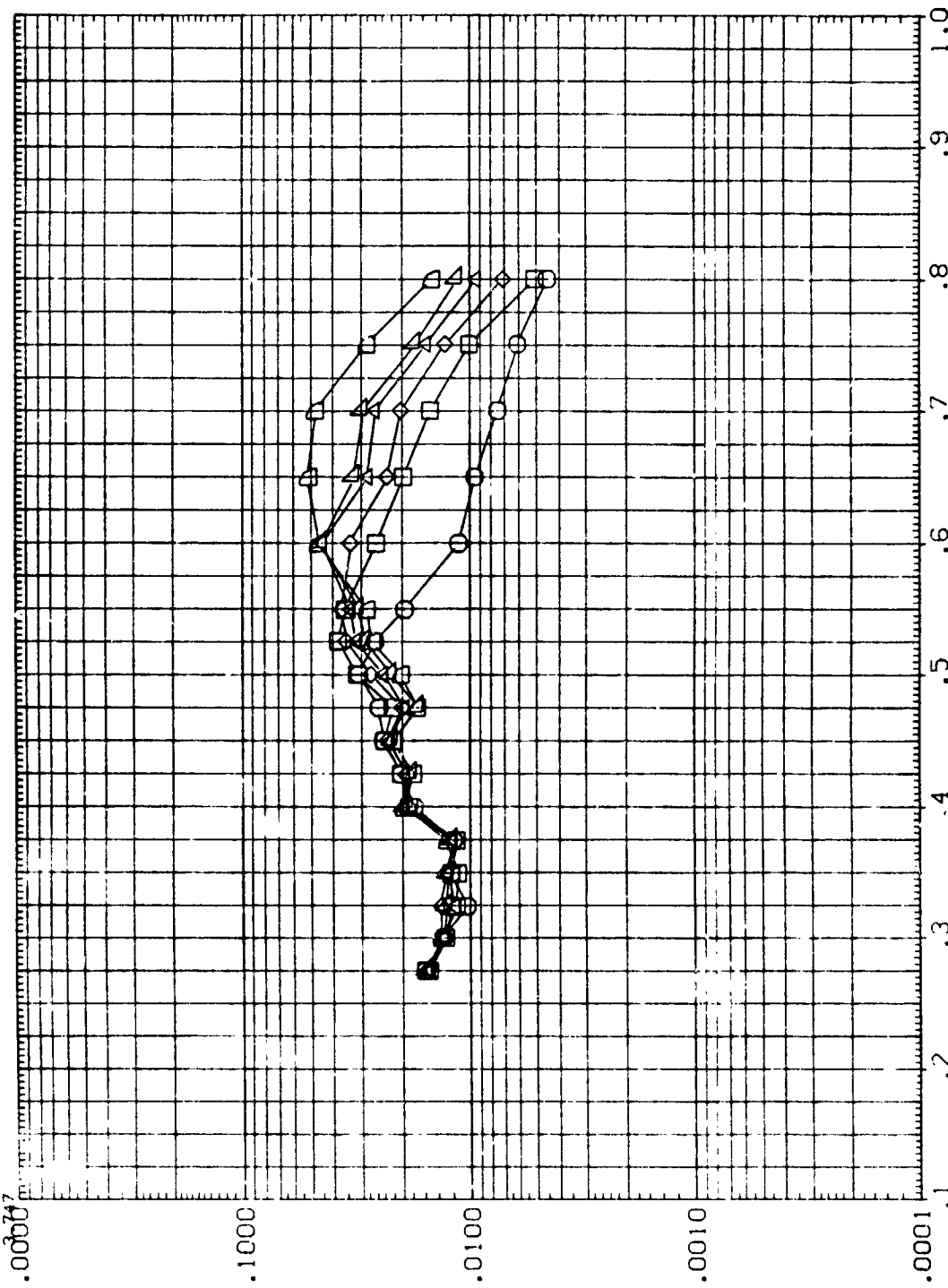


FIG. 8 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=1

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB002)

PARAMETRIC VALUES
BETA 1.000 MACH 9.000
ELEVON .000 RUDDER .000

TRACE ALPHA
1.000 34.850

SYMBOL RN/L
□ .451
◇ 1.442
△ 1.957
▽ 2.483
▽ 2.966

MEASURED TO T1L0. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

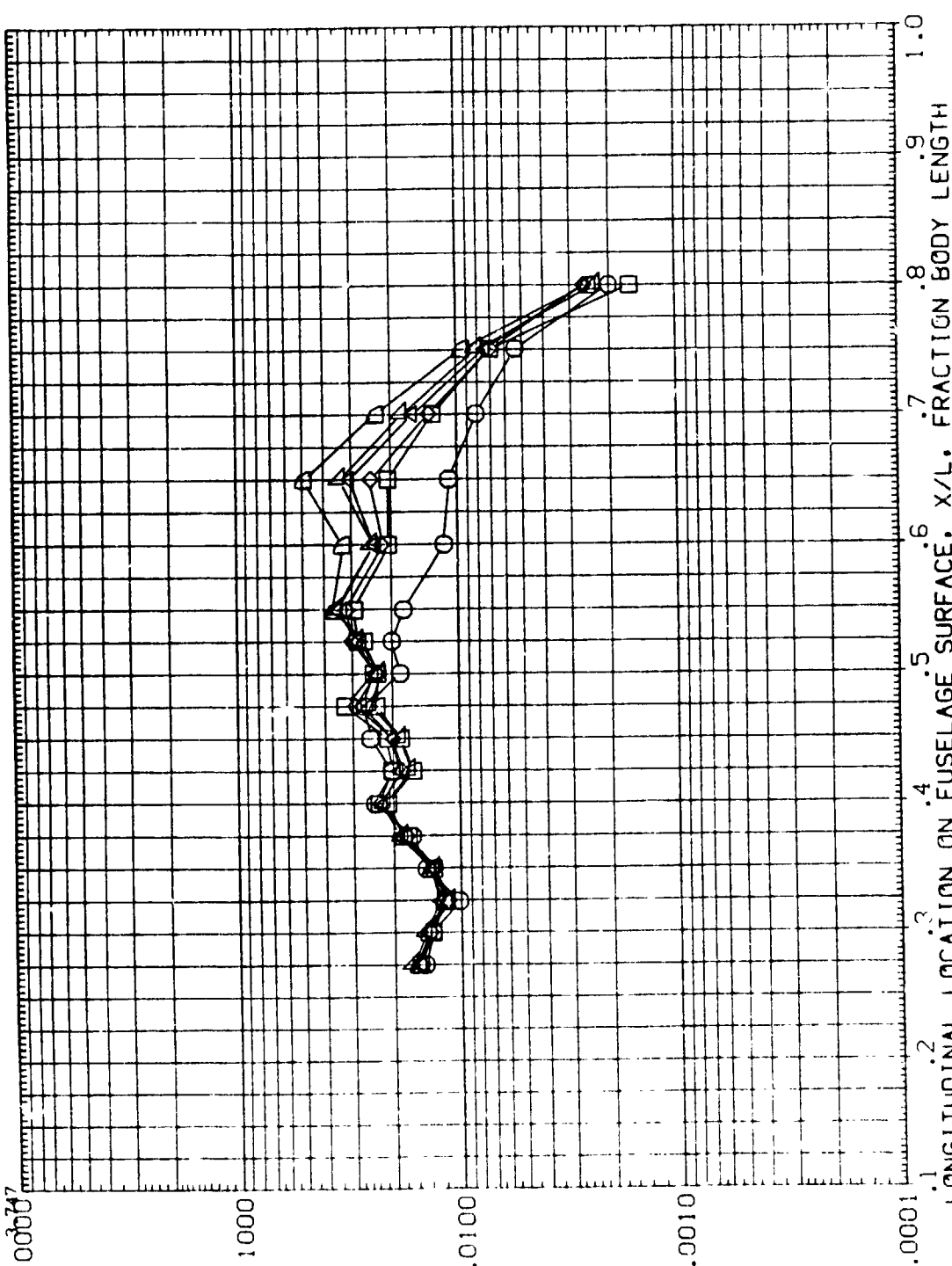


FIG. 8 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, $\beta = 1$

04-74 (1500 1418-08A) B62C12F10M16W127E52V8R19 (QVB002)

SYMBOL RM/R TRACE ALP
 ○ .451 1.000 39.770
 □ 1.442
 ◇ 1.577

PARAMETRIC VALUES
 BETA 1.000 MAC-1 8.000
 ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF

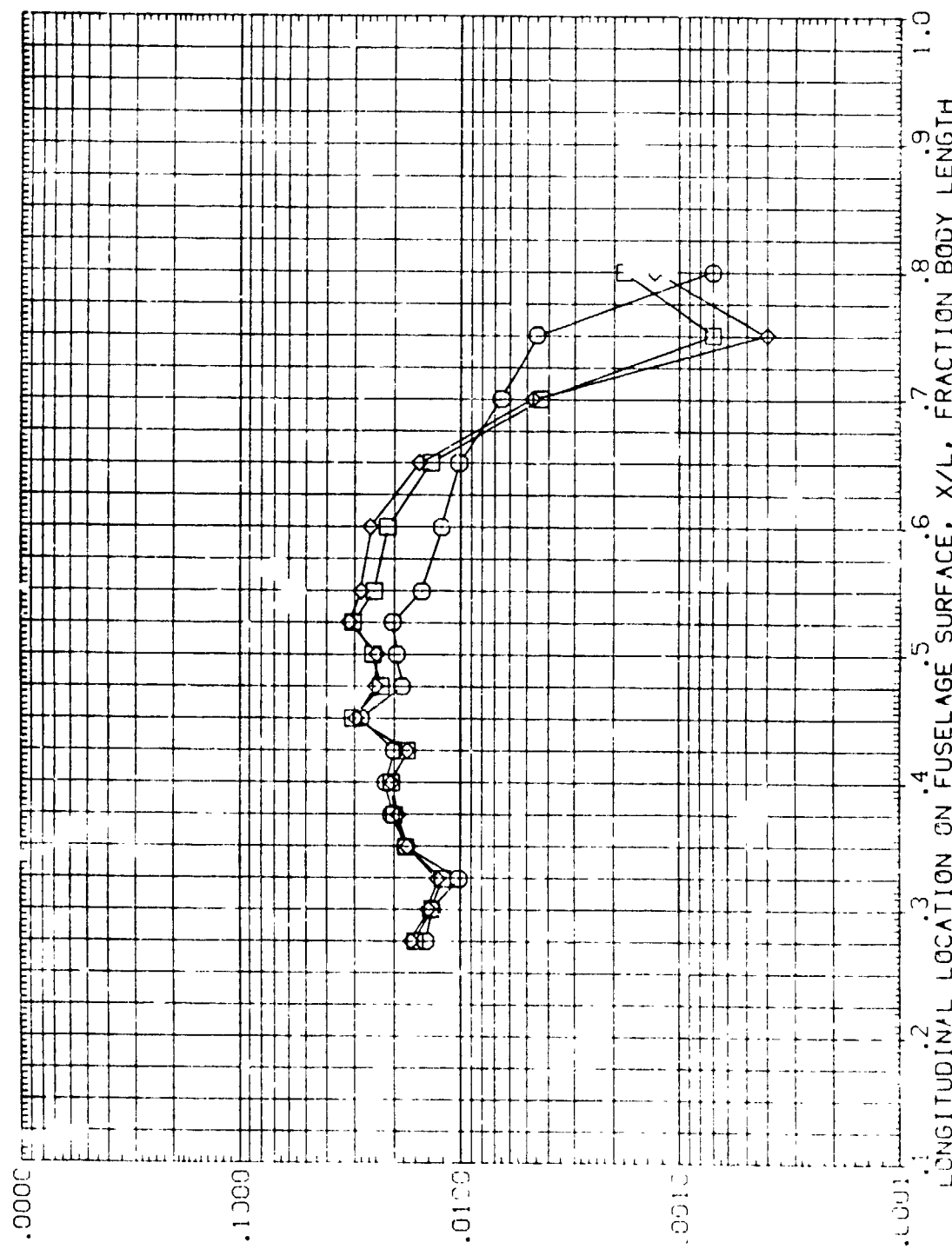


FIG. 8 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=1

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8K19 (QVB002)

SYMBOL	RM/L	TRACE	ALPHA	PARAMETRIC VALUES		
□	1.442	1.000	44.210	BETA	MACH	8.000
○	.957			ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

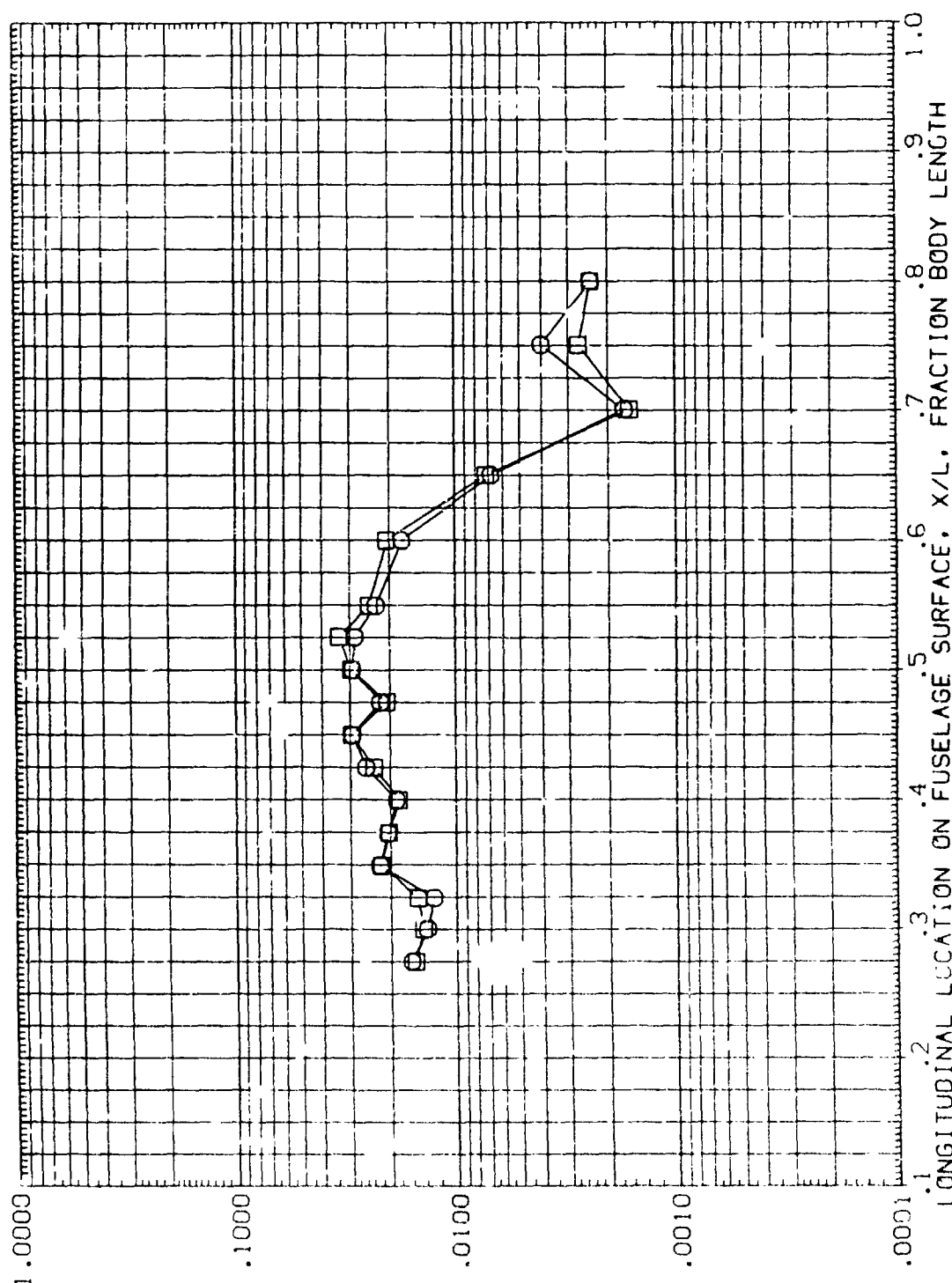


FIG. 8 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=1

Q4-74 (AEDC V41B-B8A) 862C12F10M16W127E52V8R19 (QVB002)

PARAMETRIC VALUES
BETA 1.000 MACH 8.000
ELEVON .000 RUDDER .000

SYMBOL RN/L TRACE ALPHA
1 .451 2.000 19.830
2 2.483
3 2.966
4 3.747

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

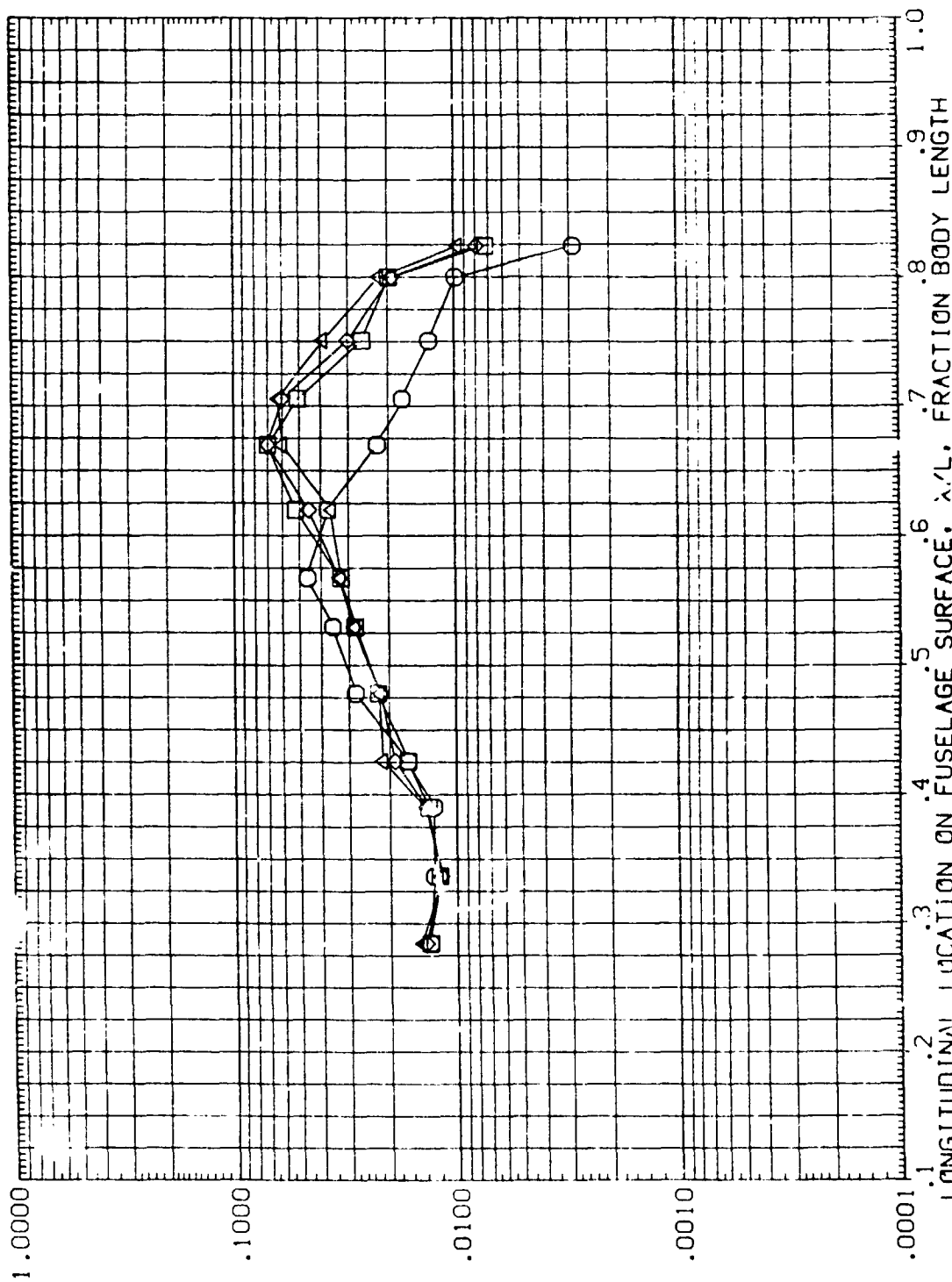


FIG. 9 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 1

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

QH-74 (AEDC V41B-B8A, 62C12F10M16W127E52V8R1, (QVB002)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	1.000	MACH	8.000
◇	.451	2.000	24.800	ELEVON	.000	RUDDER	.000
□	2.483						
△	2.966						
▽	3.747						

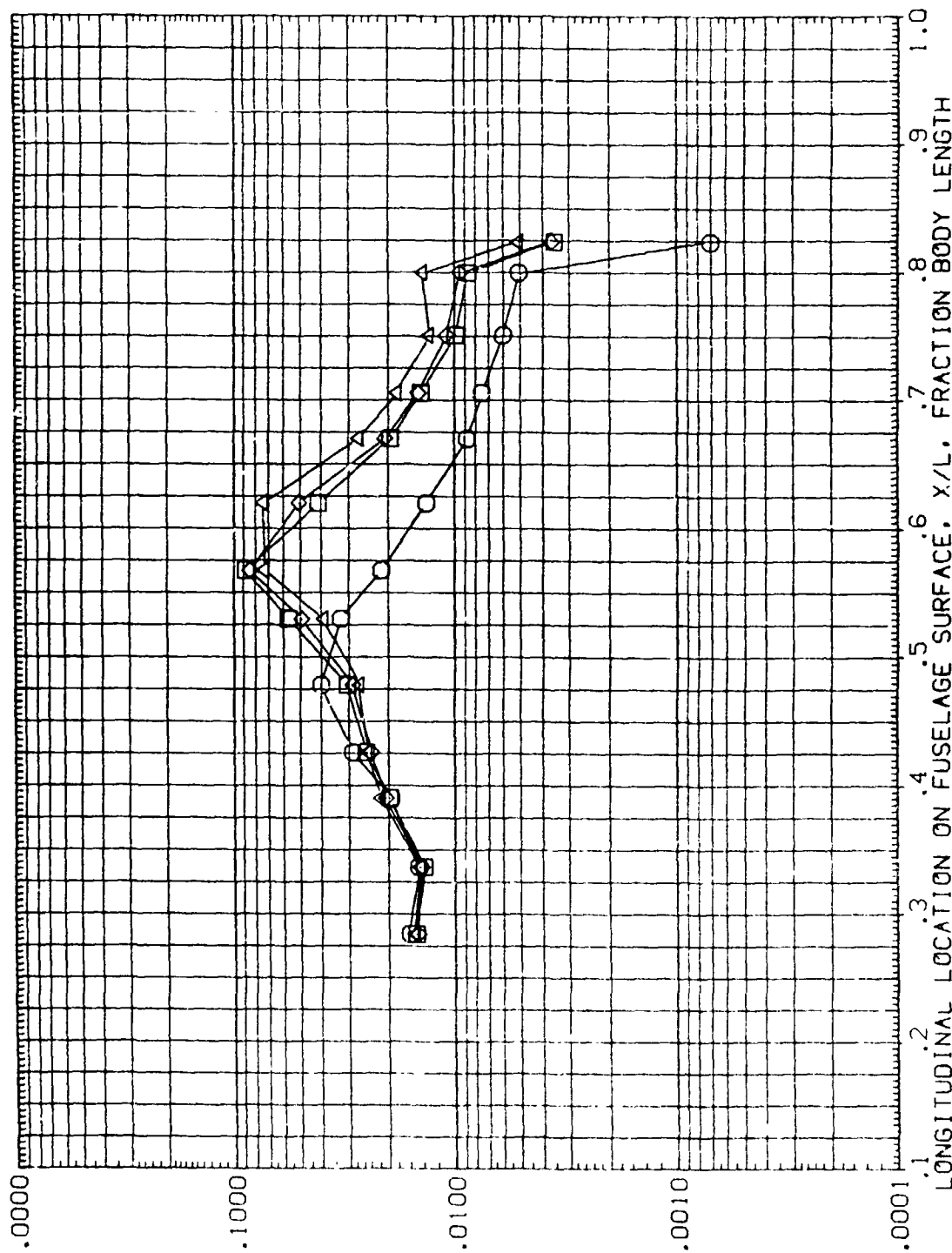


FIG. 9 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 1

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

011 74 (AE) V41B B8A) B62C12F10M16W127E52V8R19 (QVB002)

SYMBOL RATIO TRACE 29.830

PARAMETRIC VALUES

BETA 1.000 MACH 8.000
ELEVON .000 RUDDER .000

011 74 (AE) V41B B8A) B62C12F10M16W127E52V8R19 (QVB002)

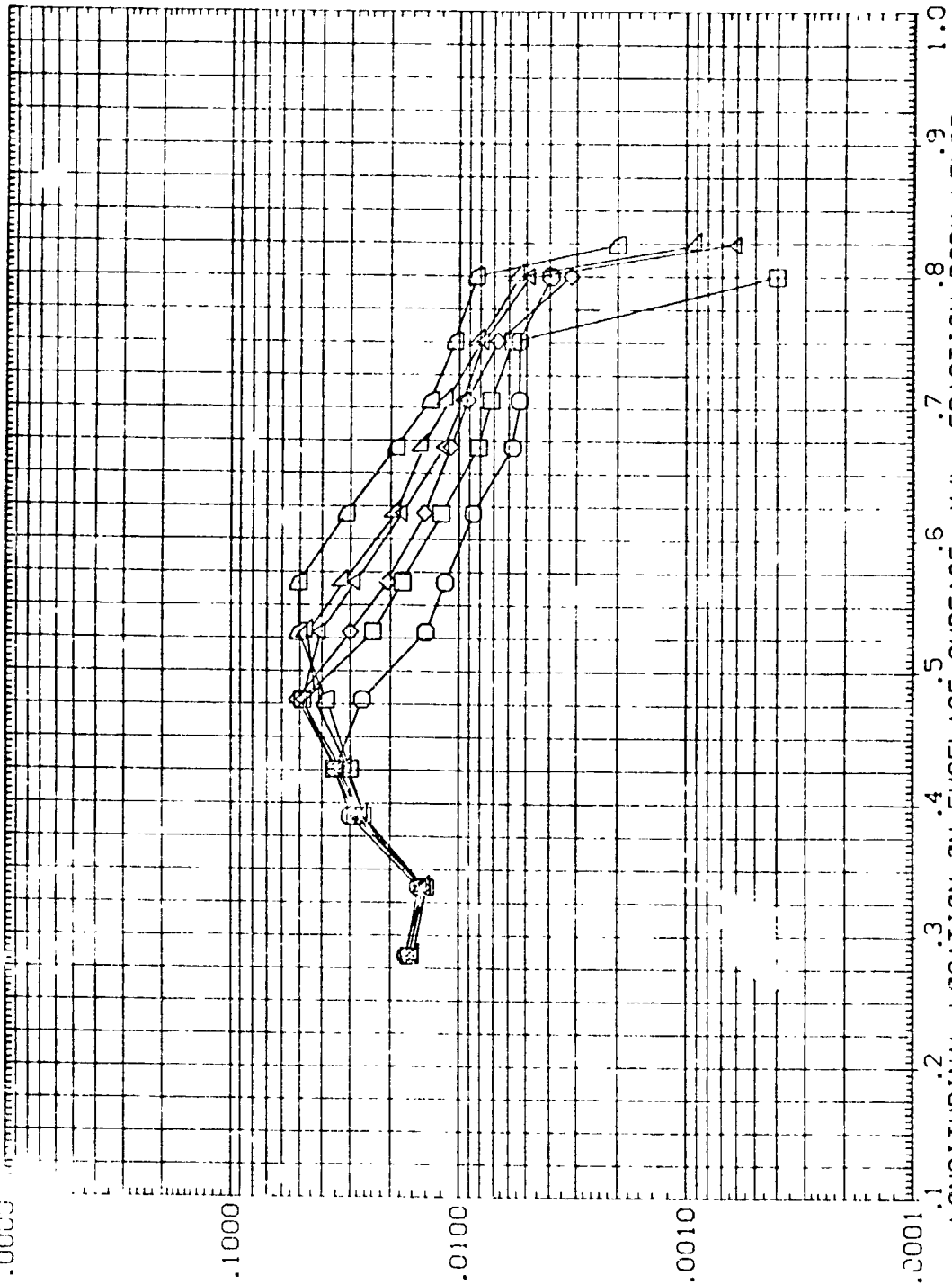


FIG. 9 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 1

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB002)

PARAMETRIC VALUES
BETA 1.000 MACH 8.000
ELEVON .000 RUDDER .000

TRACE ALPHA
2.000 34.850

SYMBOL RN/L
◇ .451
◇ 1.442
◇ 1.957
◇ 2.483
◇ 2.966
◇ 3.477

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

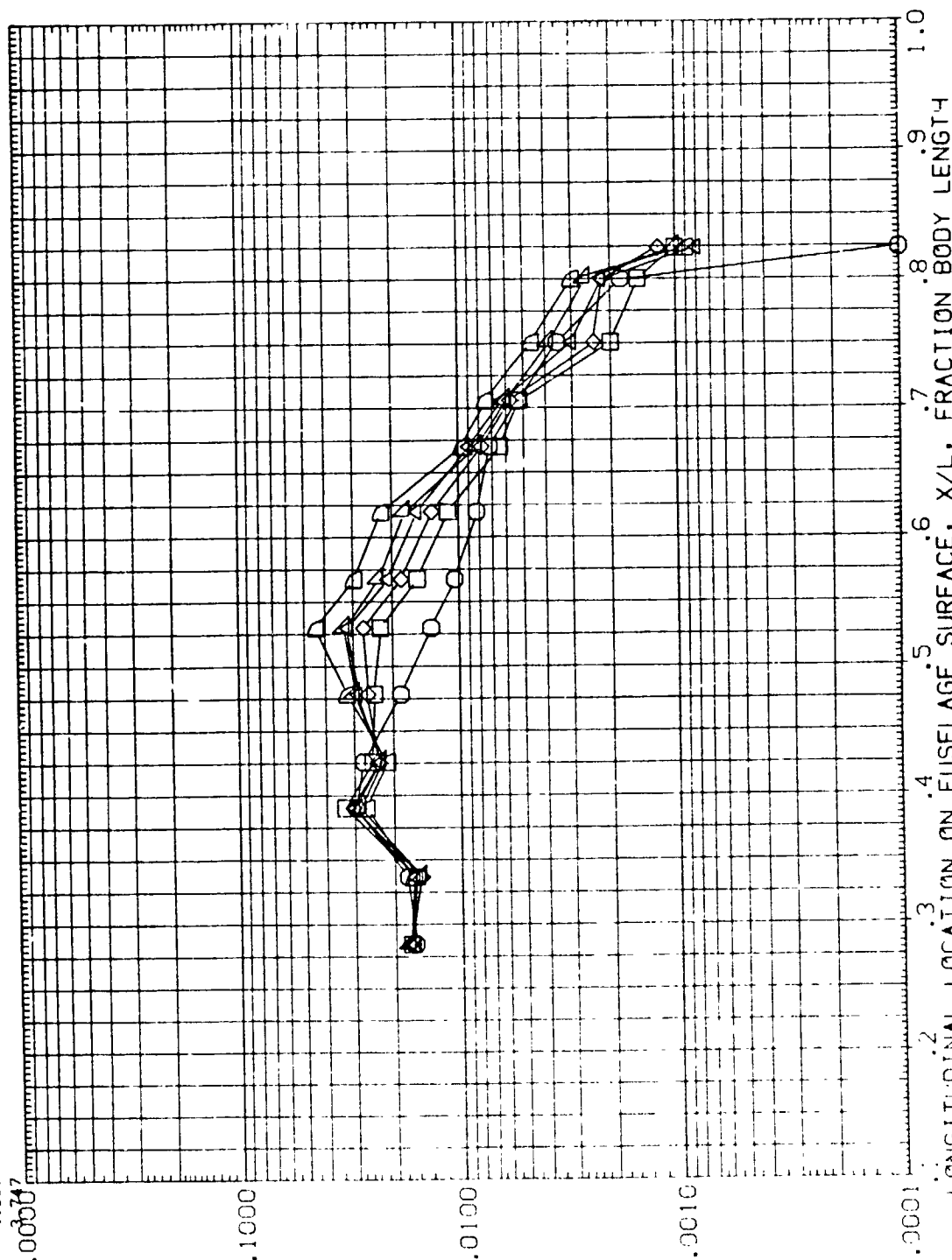


FIG. 9 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 1

OH-74 (AEDC V11B-B8A) B62C12F10M16W127E52V8R19 (QVB002)

SOL	RN/L	TRACE	ALPH	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
1	.451	2.000	39.770	.000	1.000	.000	8.000
2	1.442						
3	1.957						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

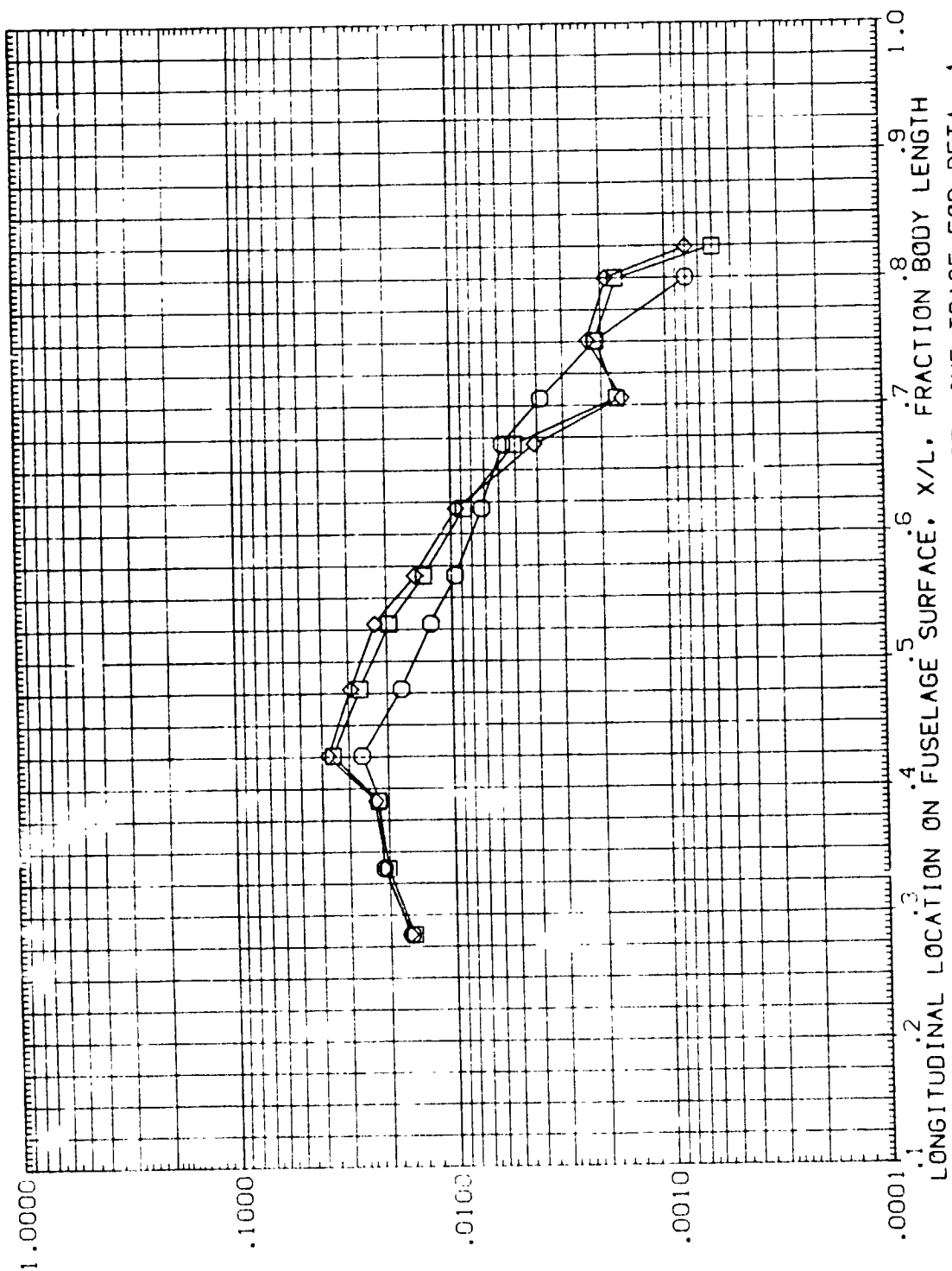


FIG. 9 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 1

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB002)

S/HBCT
 RN/L 1.442
 1.957

TRACE 2.000
 ALPHA 44.210
 PARAMETRIC VALUES
 BETA 1.000
 ELEVON .000
 MACH 8.000
 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

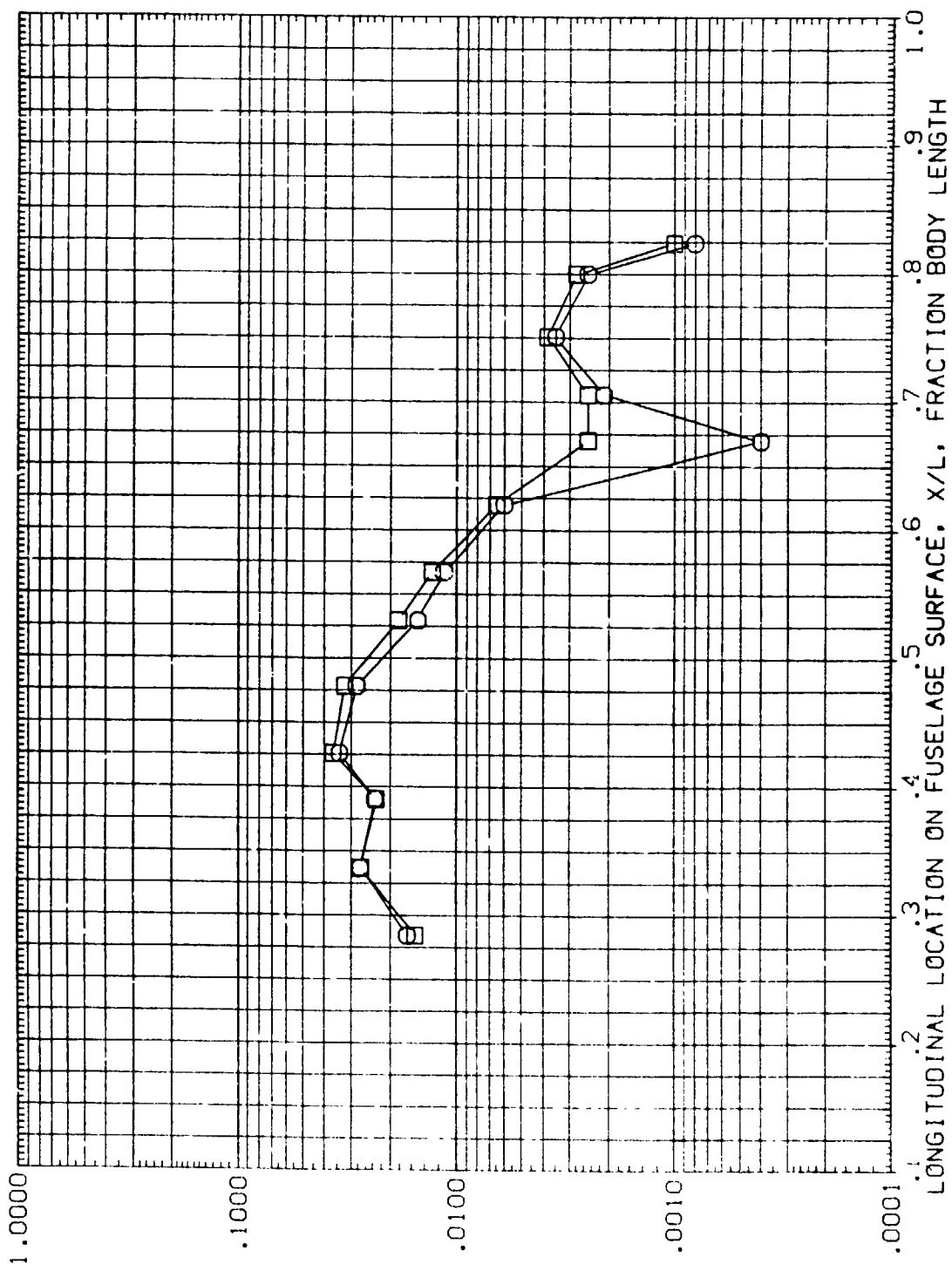


FIG. 9 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA=1

OH-74 (A10C V41B-38A) B62C12F10M16W127E52V8R19 (QVB0002)

SYMBOL	M/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	ELEVON	MACH	RUDDER
△	.451	3.000	19.830	1.000	.000	8.000	.000
□	2.483						
○	2.966						
◇	3.747						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

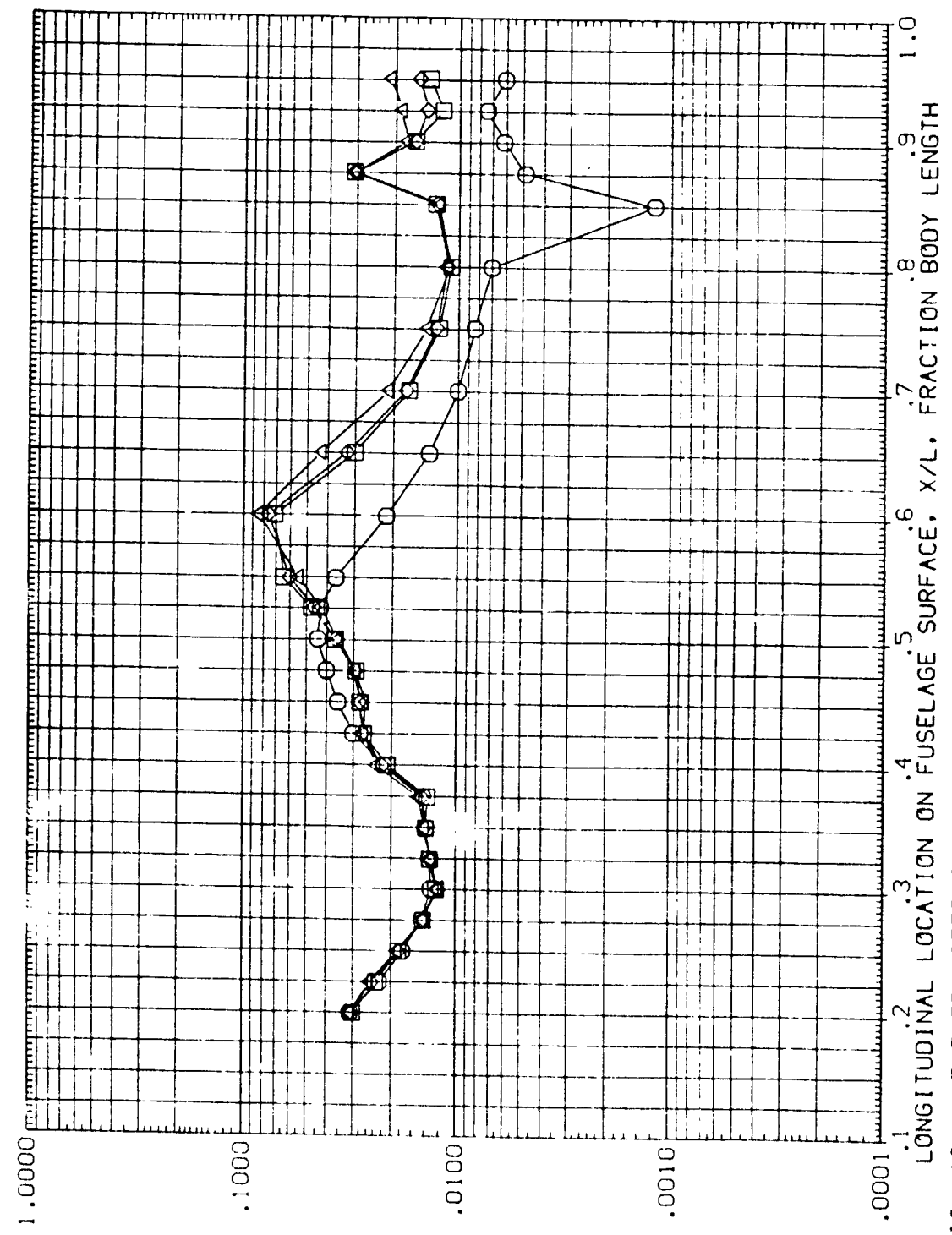


FIG. 10 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 1

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB002)

SYMBOL
 ◇
 □
 ○

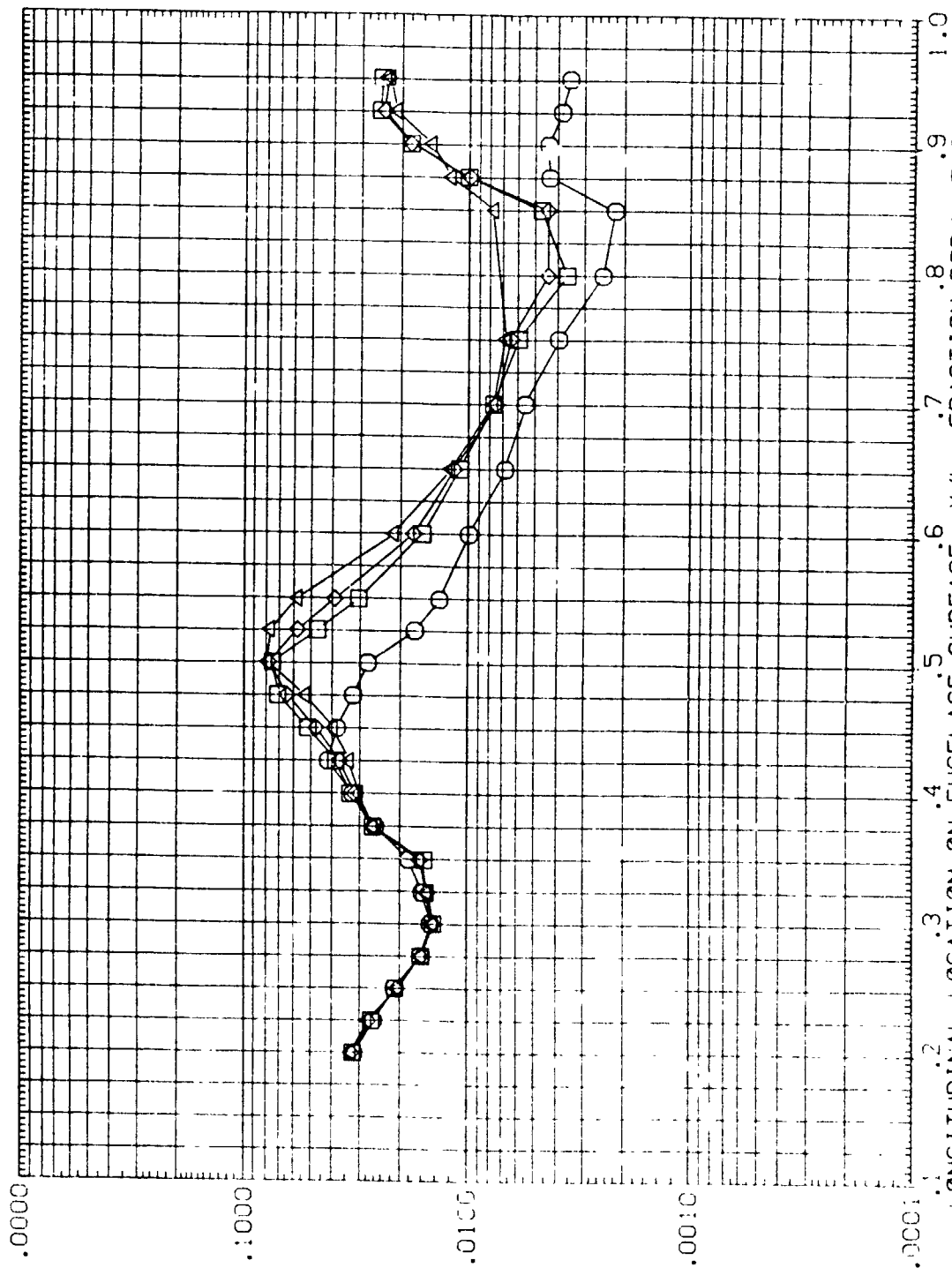
RN/L
 .451
 2.483
 2.966
 3.747

TRACE
 3.000
 24.800

ALPHA
 24.800

PARAMETRIC VALUES
 BETA
 1.000
 .000
 .000
 MACH
 RUDDER
 8.000
 .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF



LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH

FIG. 10 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA=1

REPRODUCIBILITY OF THE
 ORIGINAL PAGE IS POOR

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB002)

SYMBOL RN/I TRACE ALPHA
 1.442 3.000 29.830
 1.957
 2.483
 2.966

PARAMETRIC VALUES
 BETA 1.000 MACH 8.000
 ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

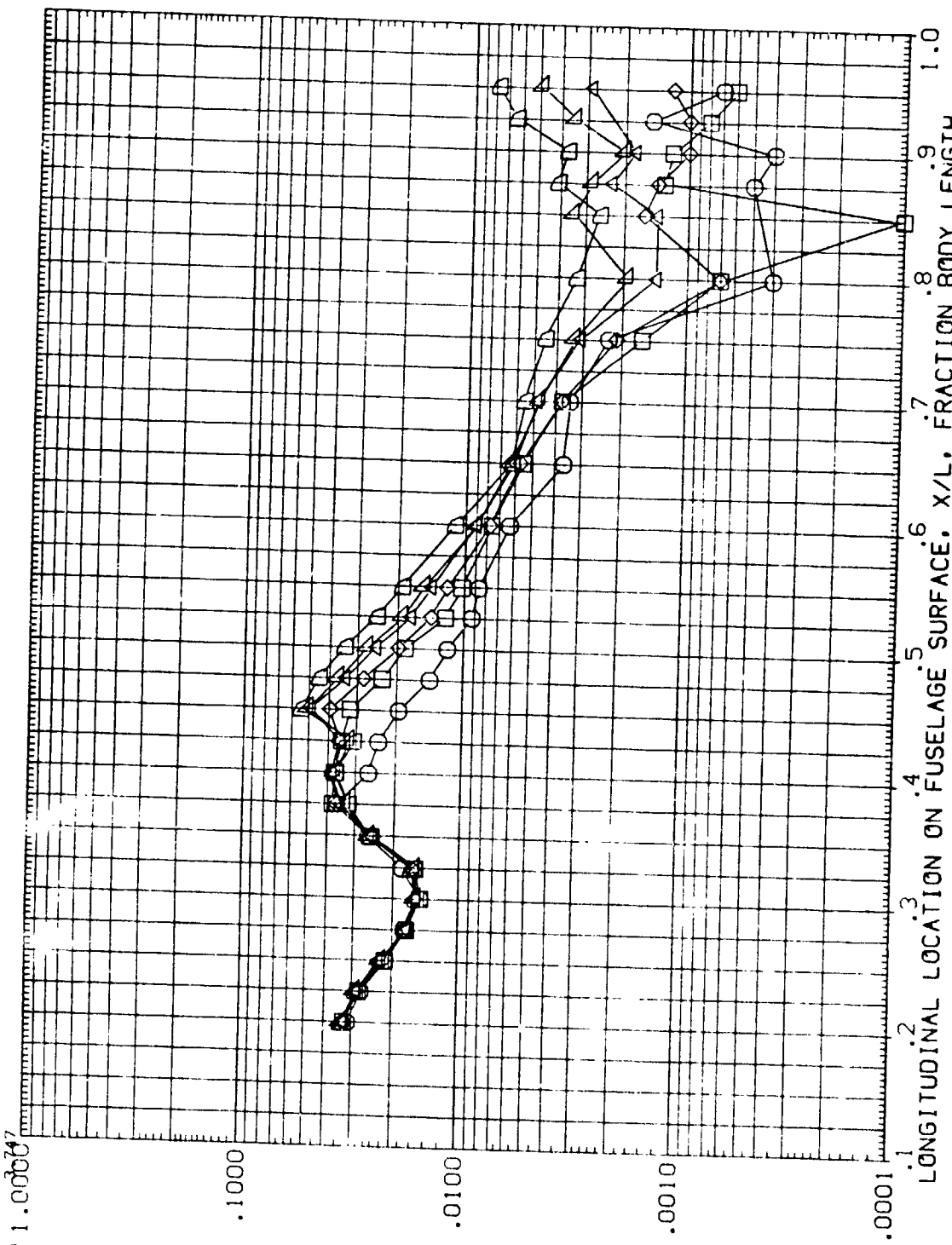


FIG. 10 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 1

OH-74 (AEC V41B-B8A) B62C12F10M16W127C52V8R19 (QVB002)

PARAMETRIC VALUES
 BETA 1.000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE 3.000 ALPHA 34.850

SYMBOL RN/L
 □ .451
 ◇ 1.442
 △ 1.957
 ▽ 2.483
 ▽ 2.966

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

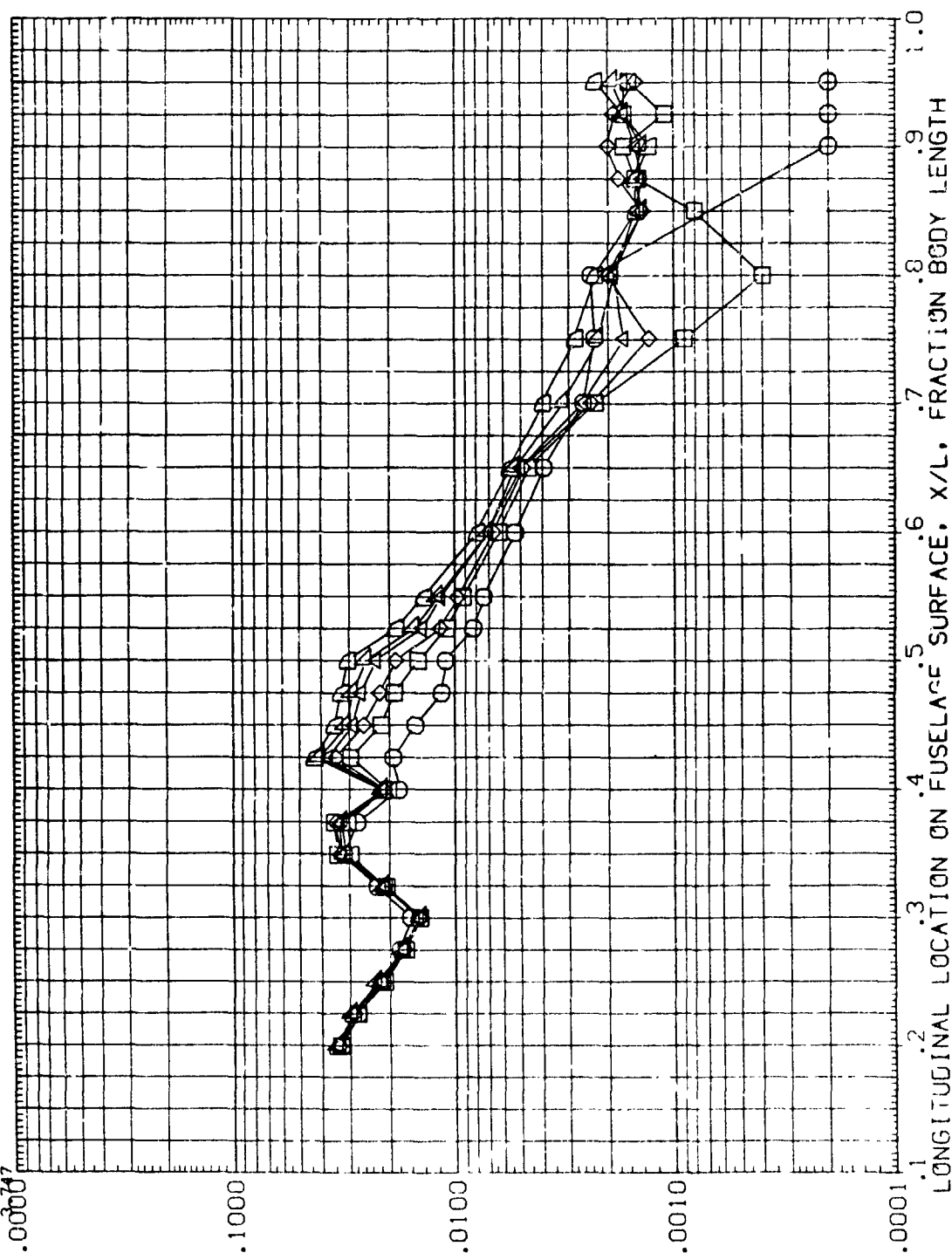


FIG. 10 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 1

04-74 (AEDC V41B-98A) B62C12F10M16W127E52V8R19 (QVB0002)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	1.000	MACH	8.000
○	1.42	3.000	39.770	ELEVON	.000	RUDDER	.000
□	1.42						
◇	1.57						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR .9H/HREF

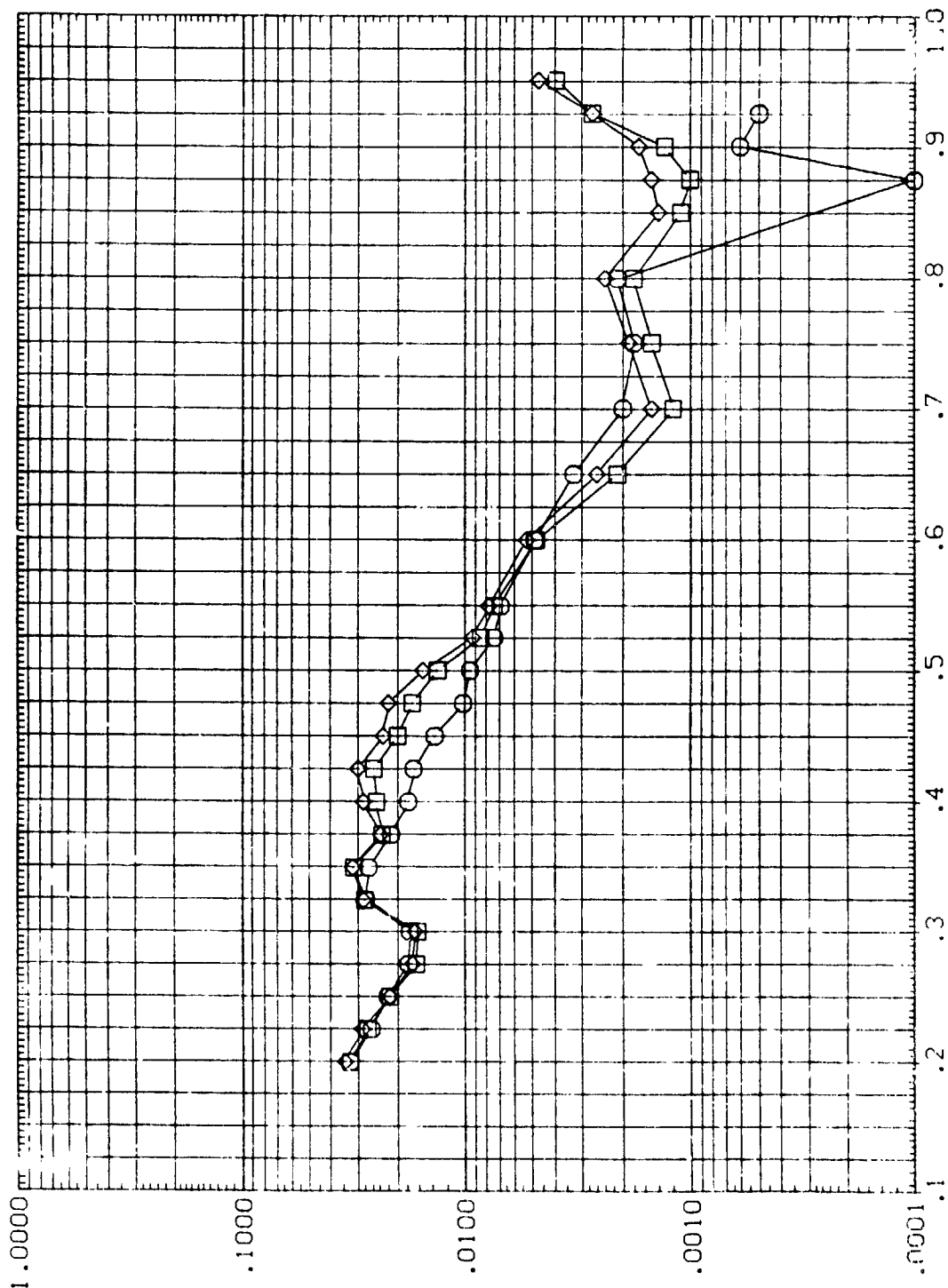


FIG. 10 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 1

SYMBOL RN/L TRACE ALPHA
 1.442 3.000 44.210
 1.957

PARAMETRIC VALUES
 BETA 1.000 MACH 8.000
 ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

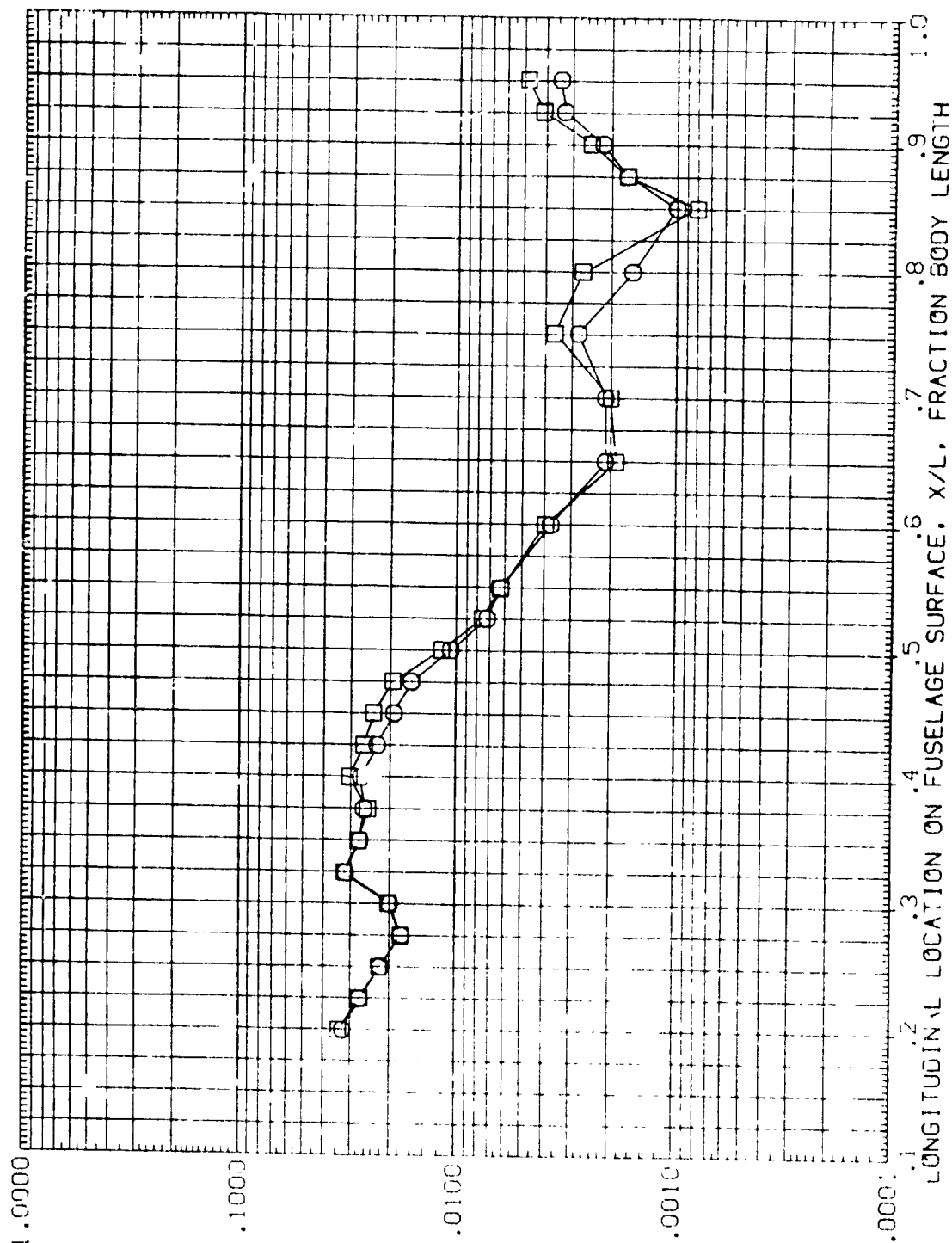


FIG. 10 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 1

CH-74 (AED) V41B-B8A) B62C12F1CM16W127E52V8R19 (QVB002)

PARAMETRIC VALUES
BETA 1.000 MACH 8.000
ELEVON .000 RUDDER .000

SYMBOL R² TRACE ALPHA
1 4.000 19.830
2 2.7
3 2.700
4 3.74

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

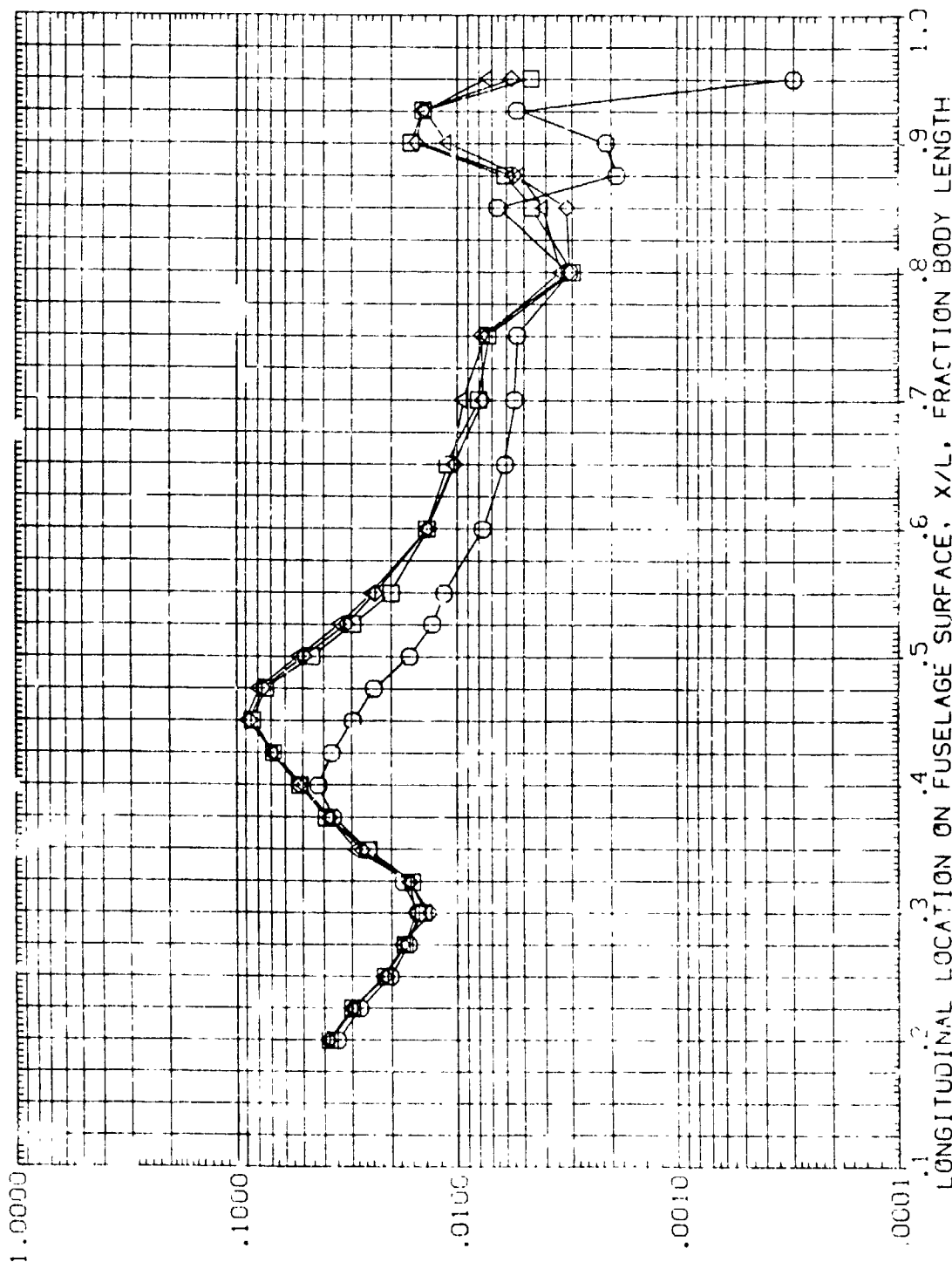


FIG. 11 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = 1

Q11-74 AEDC V418-B3A) B62C12F10M16W:27F52V3R19 (QV5002)

PARAMETRIC VALUES
 BETA 1.000 MACH 8.000
 ELEVON .000 RUDDER .000

SYMBOL PN/L TRACE ALPHA
 O .451 4.000 24.800
 X 2.4B3
 + 2.366
 * 3.747

MEASURED TO THEO. HEAT TRANSFER RATIO AT .4 RECOVERY FACTOR. . HREF

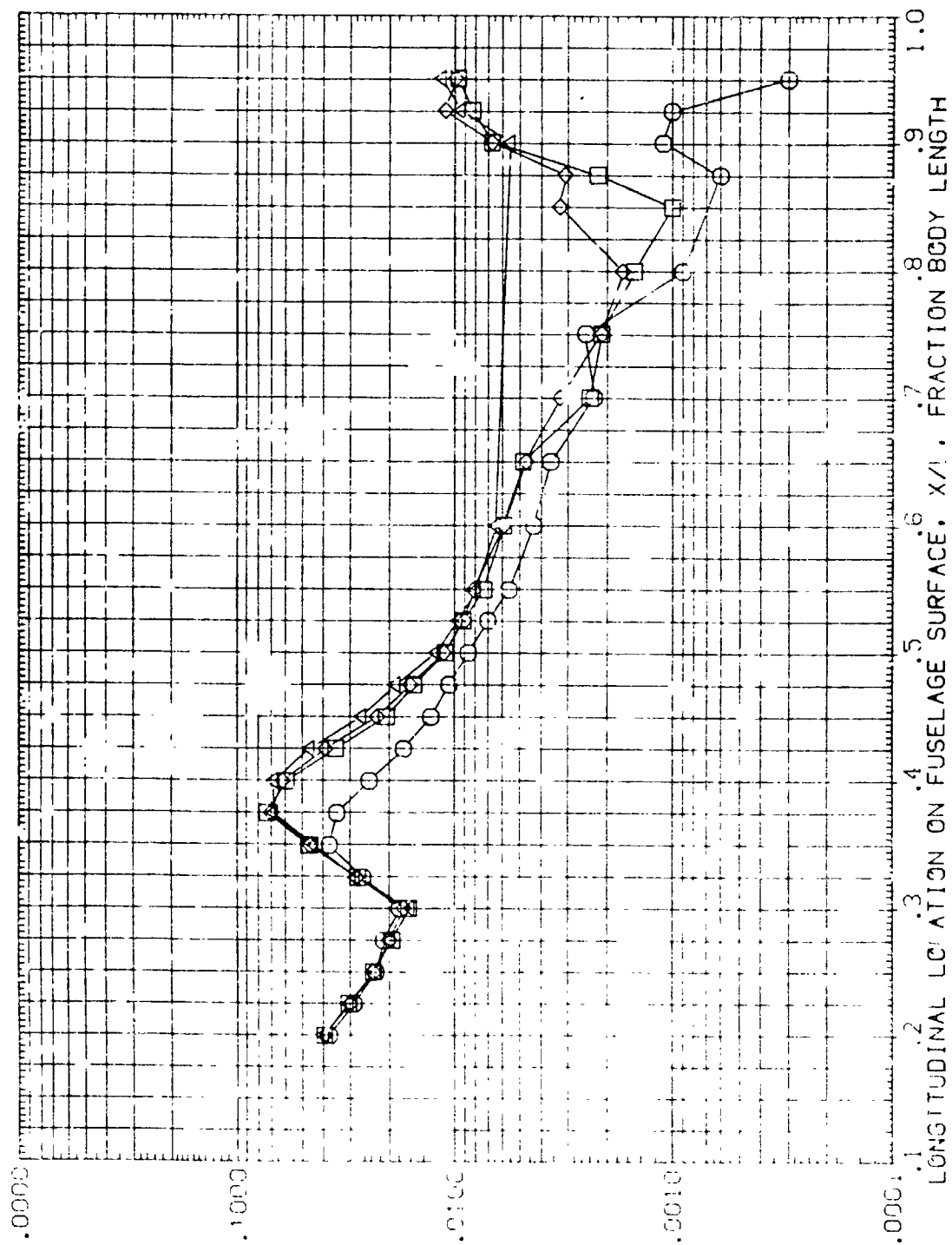


FIG. 11 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 1

QH 74 (AFDC 41B-B8A) 62C12F10M16W127E52V8R19 (QVB00.1)

SYMBOL K_N TRACE A/P 29.650

PARAMETRIC VALUES
BETA 1.000 MACH 8.000
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

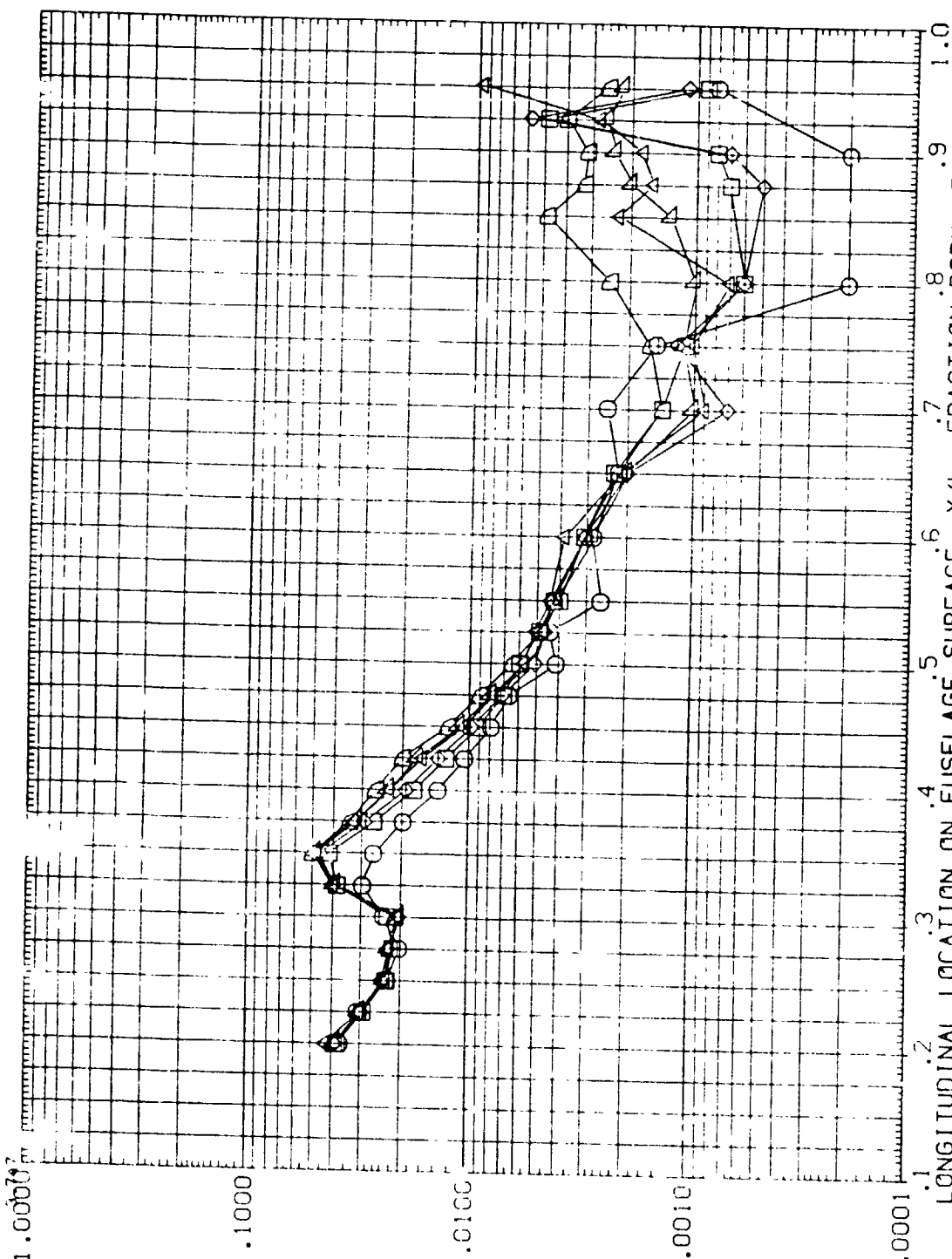


FIG. 11 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 1

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-74 (AEDC V413-B8A) B62C12F10M16W127E52V8R19 (QV8002)

PARAMETRIC VALUES
BETA 1.000 MACH 8.000
ELEVON .000 RUDDER .000

TRACE ALPHA
4.000 34.850

SYMBOL RN/L
1.451
1.442
1.957
2.483
2.966

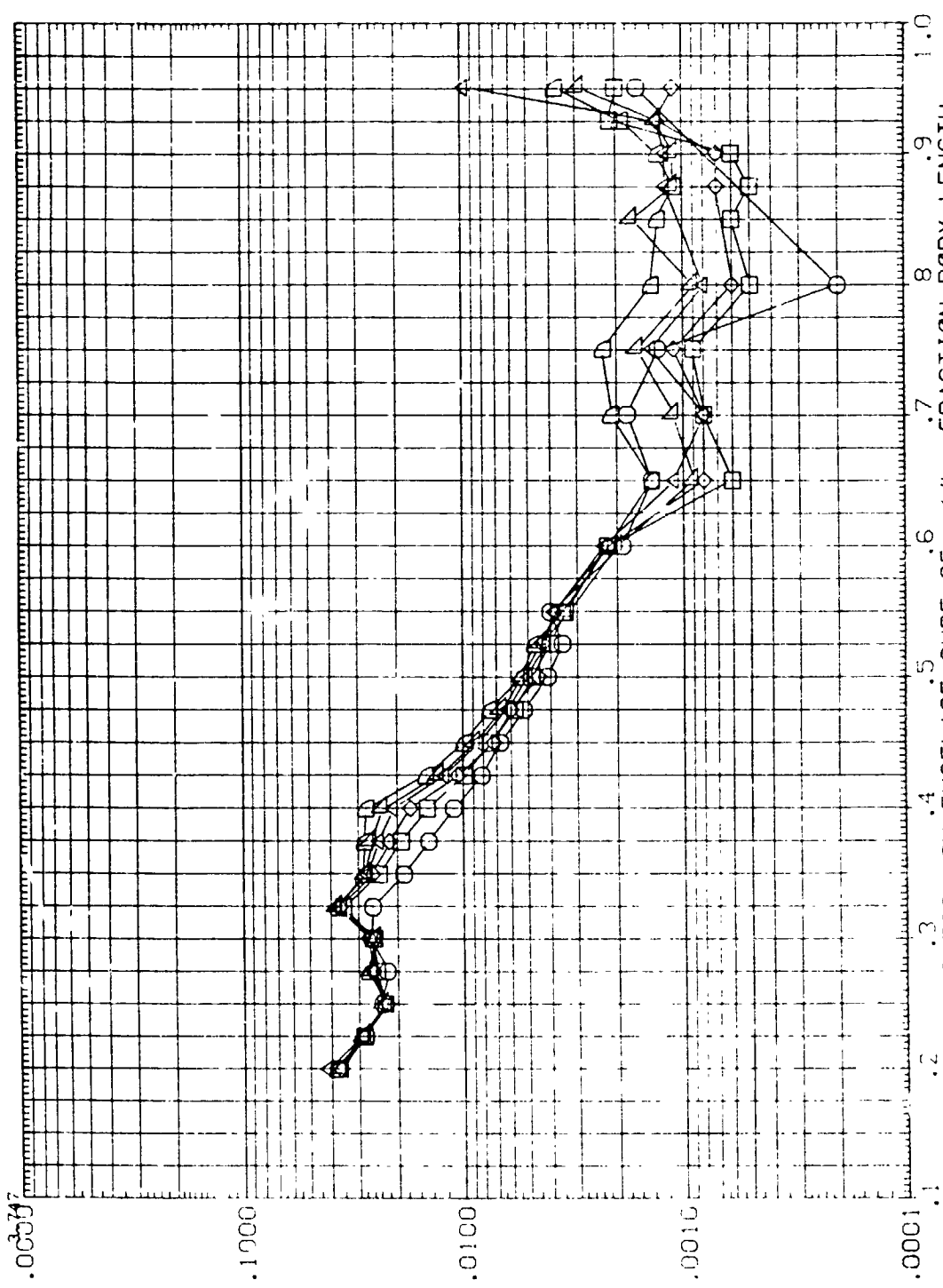


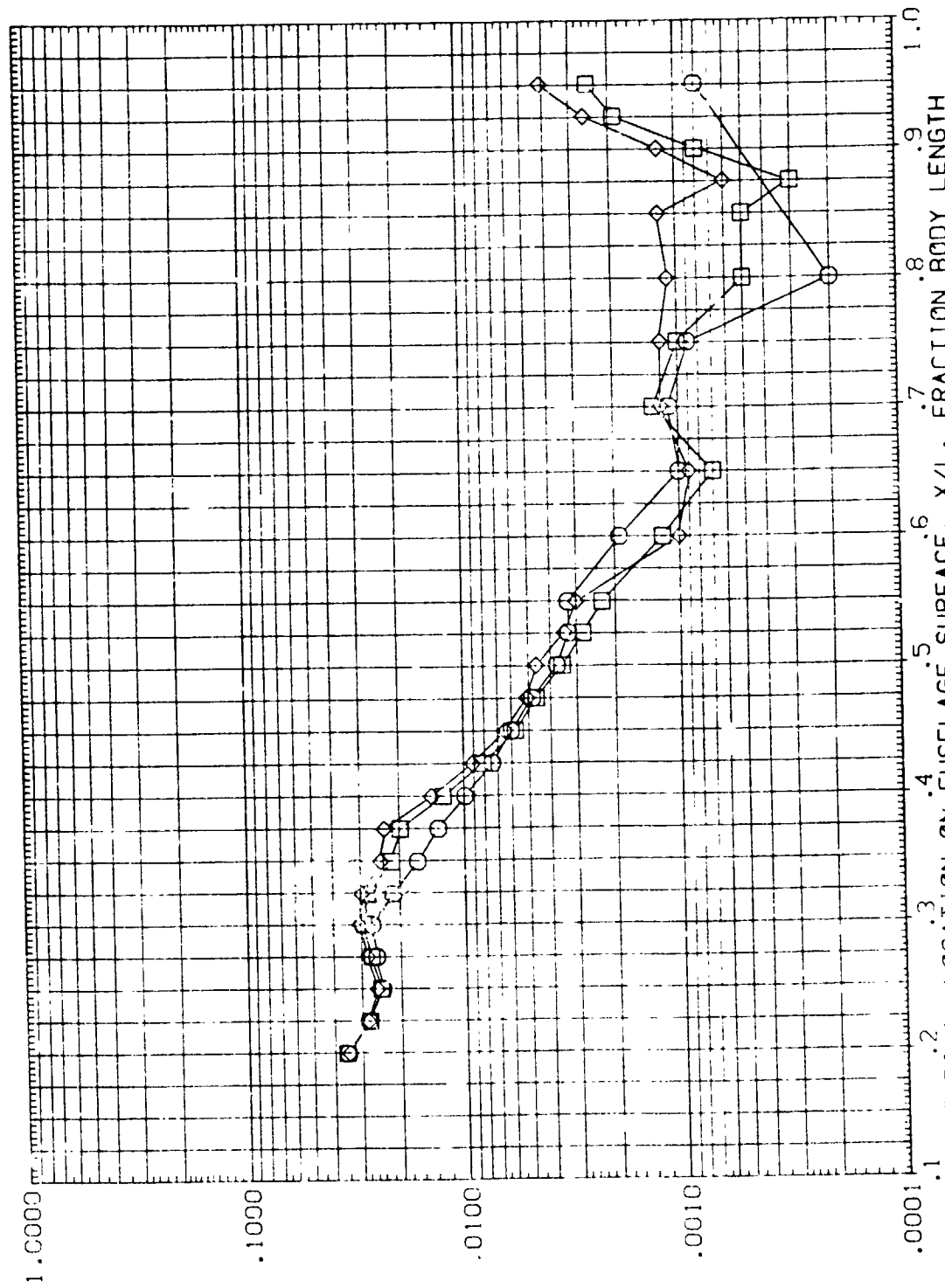
FIG. 11 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH
HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 1

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

CH-74 (AEDC V-1B-B8A) B62C12F:OM16W127E5V8R19 (QVB0002)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	1.000	MACH	8.000
□	1.42	4.000	39.770	ELEVON	.000	RUDDER	.000
○	1.957						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .5H/HREF



LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH

FIG. 11 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 1

OH-74 (AEDC V413-B8A) B62C12F10M16W127E52V8R19 (QVB002)

SYMBOL RN/L TRACE ALPHA
 1.442 4.000 44.210
 1.957

PARAMETRIC VALUES
 BETA 1.010 HACH 8.000
 ELEVEN .010 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

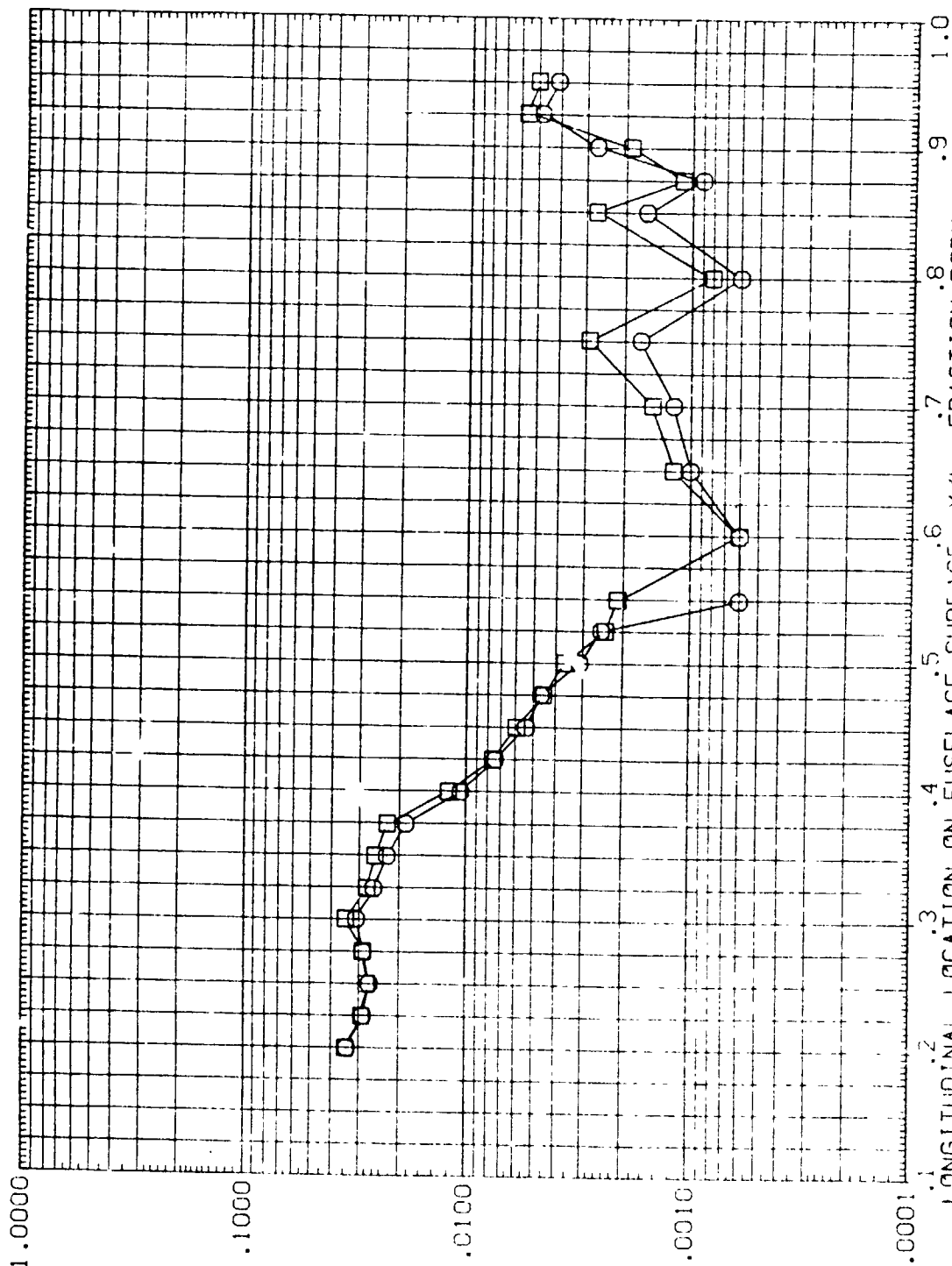


FIG. 11 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 1

JH-74 (AFDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL	REYNOLDS	TRACE	ANGLE	BETA	ELEVON	PARAMETRIC VALUES	2.000	MACH	8.000
◇	.445	1.000	19.840						
□	2.492								
◇	2.945								
◇	3.750								

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9/REF

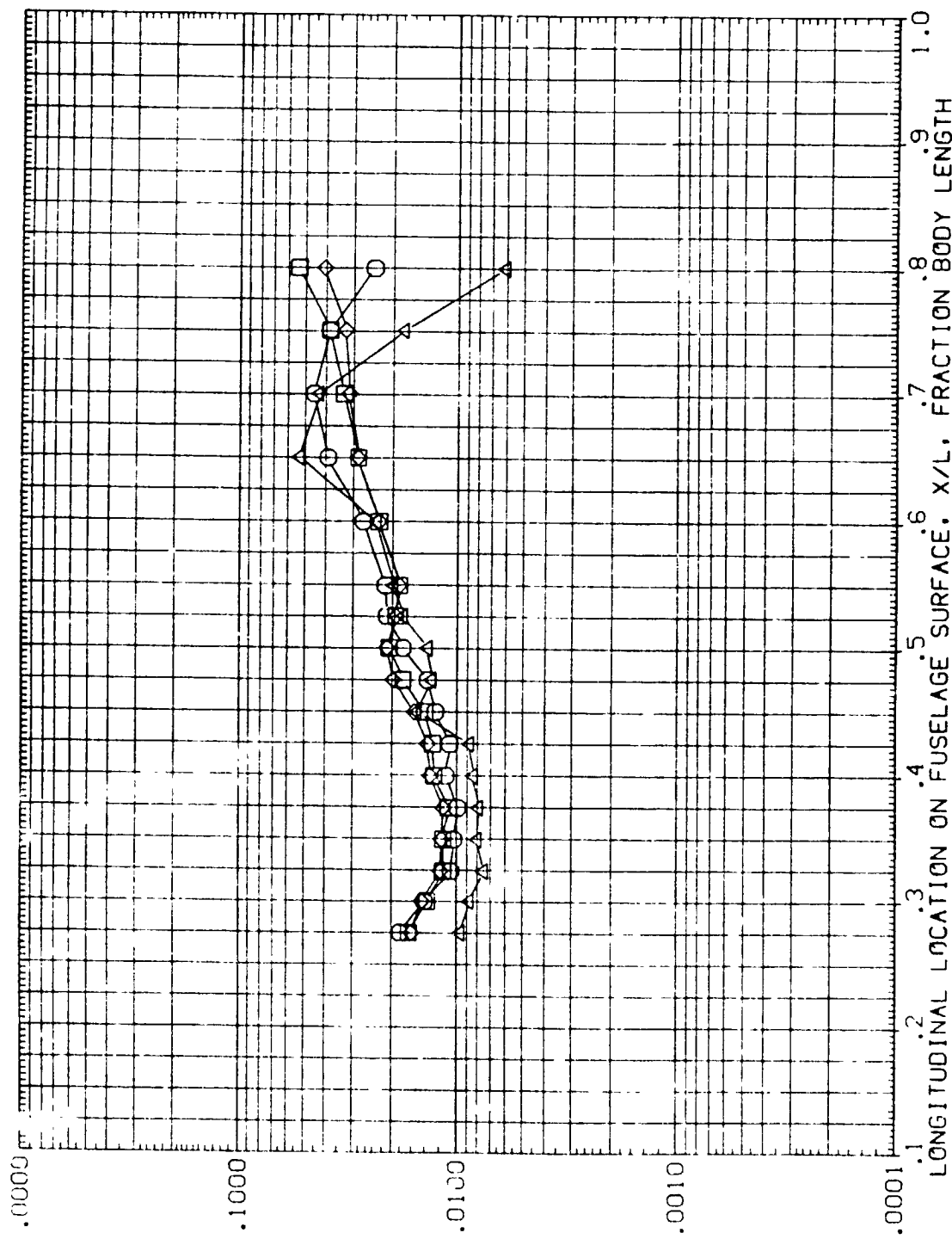


FIG. 12 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA = 2

OH-74 (AEDC V41B-B8A) 862C12F10M16W127E52V8R19 (RVB003)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	8.000
○	.445	1.000	24.850	ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

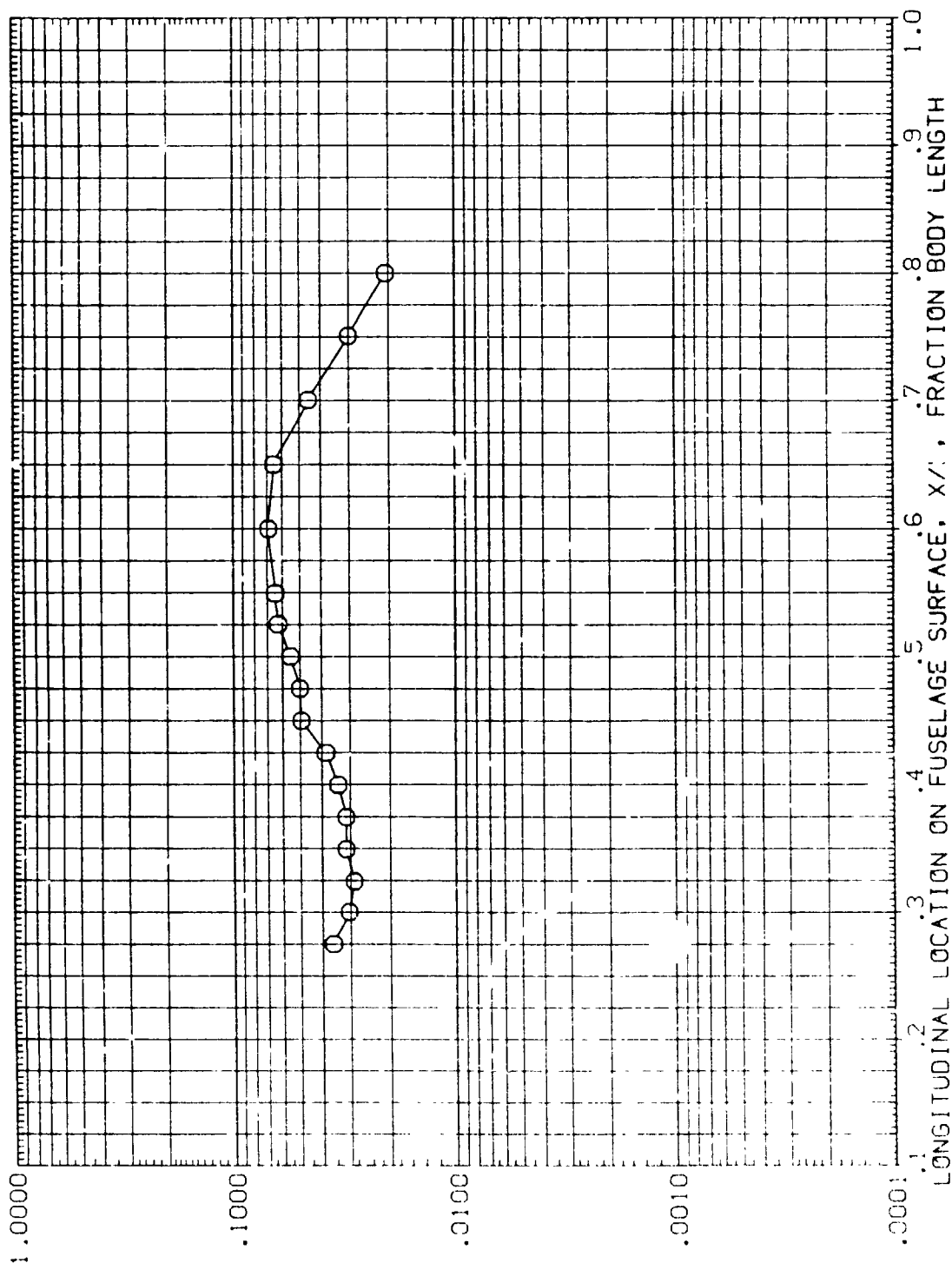


FIG. 12 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA= 2

OH-74 (AELC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

PARAMETRIC VALUES
 BETA 2.000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE ALPHA
 1.000 29.830

REYNOLDS NUMBER
 .445
 1.44
 1.954
 2.492
 2.945

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, $\phi_{H/HREF}$

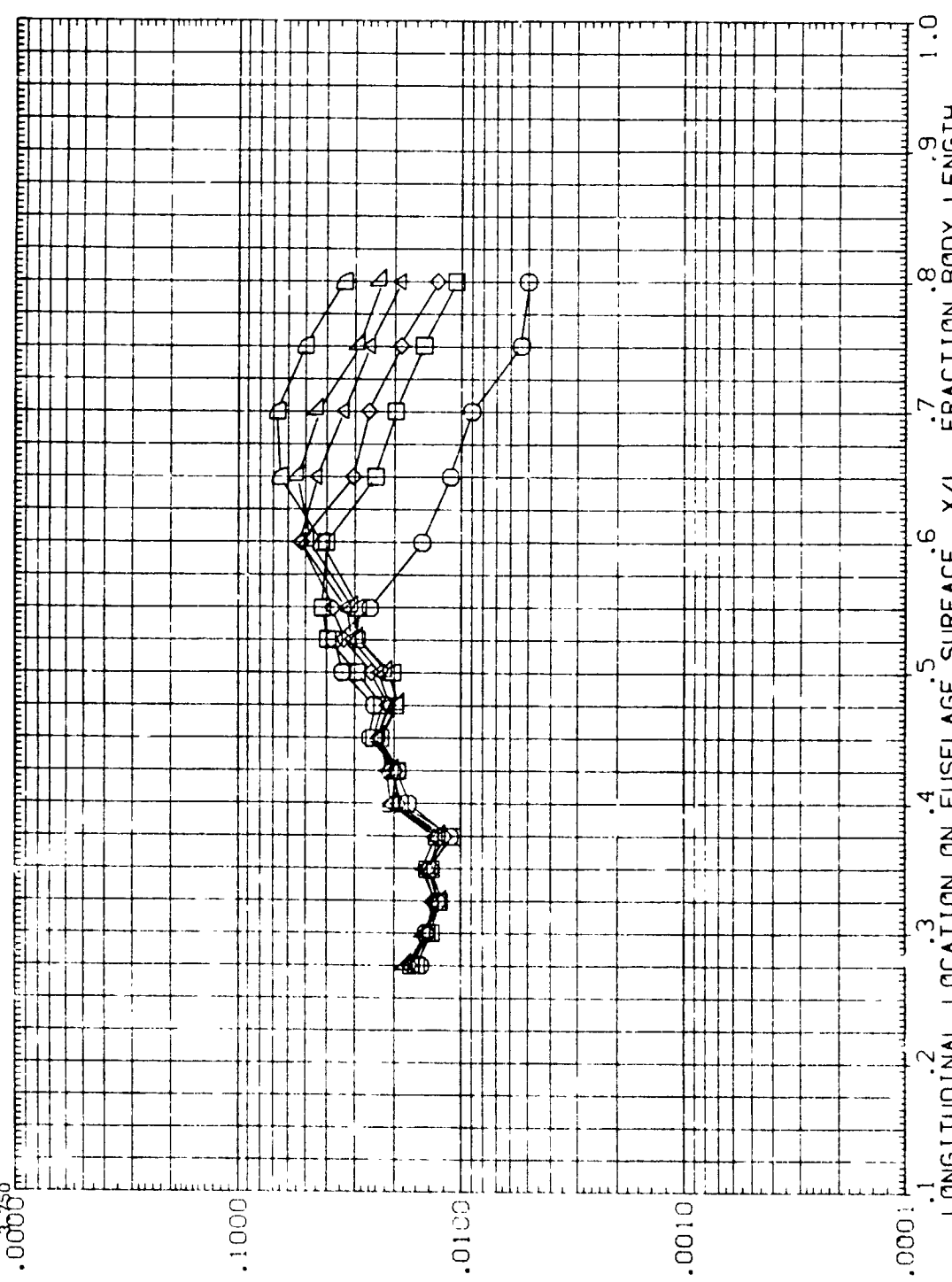


FIG. 12 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, x/L , FRACTION BODY LENGTH
 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, $BETA = 2$

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	8.000
○	.445	1.000	34.850	ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF

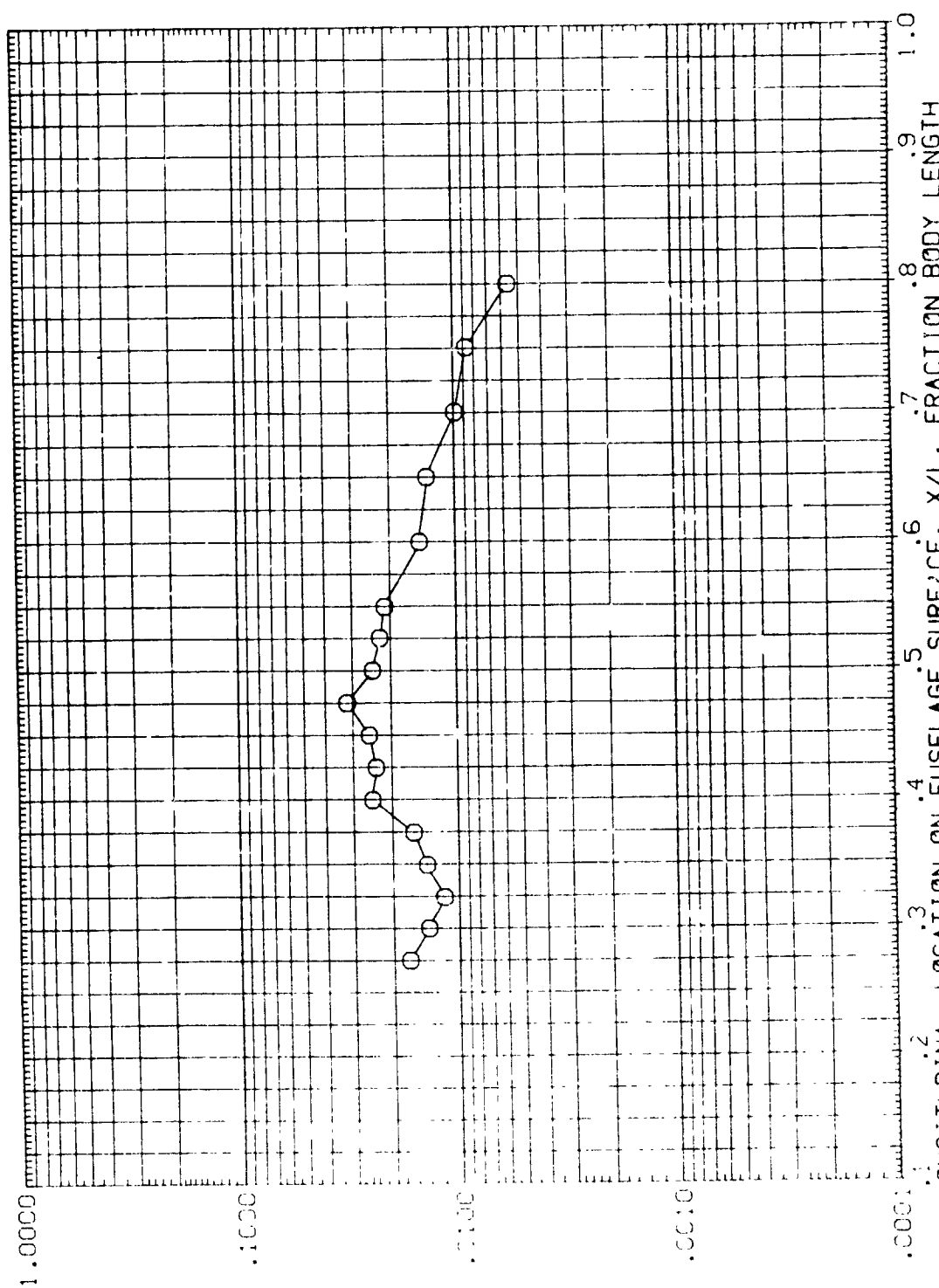


FIG. 12 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA= 2

74-74 (AEDC V41B B8A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL	PN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
○	445	1.000	39.790	ELEVON	.000	.000	8.000
◇	1.440						
◇	1.954						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

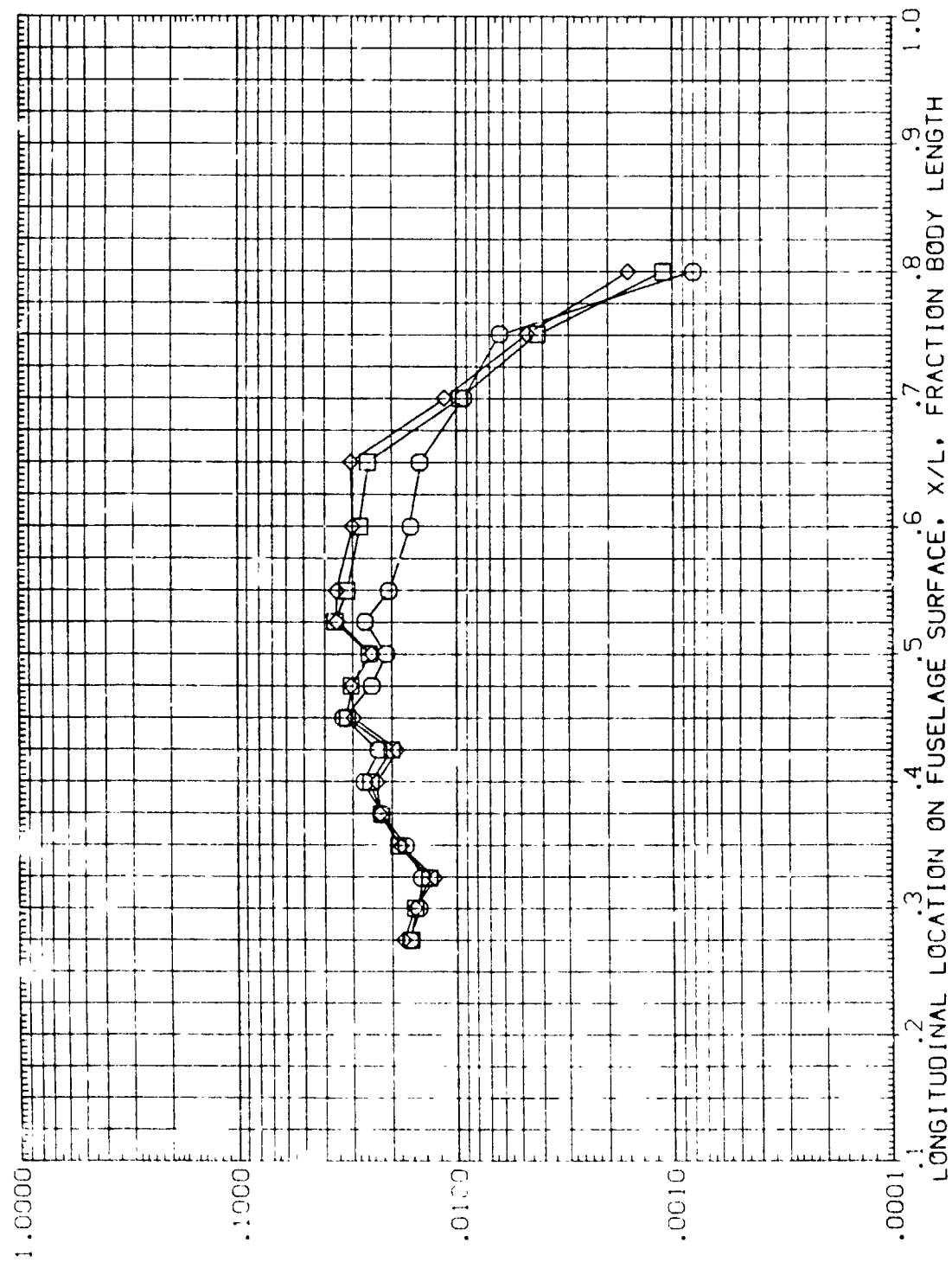


FIG. 12 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=2

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

PARAMETRIC VALUES
 BETA 2.000 MACH 8.000
 ELEVON .000 RUDDER .000

SYMBOL RN/L TRACE ALPHA
 ○ .443 2.000 19.840
 □ 2.492
 ◇ 2.945
 △ 3.750

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

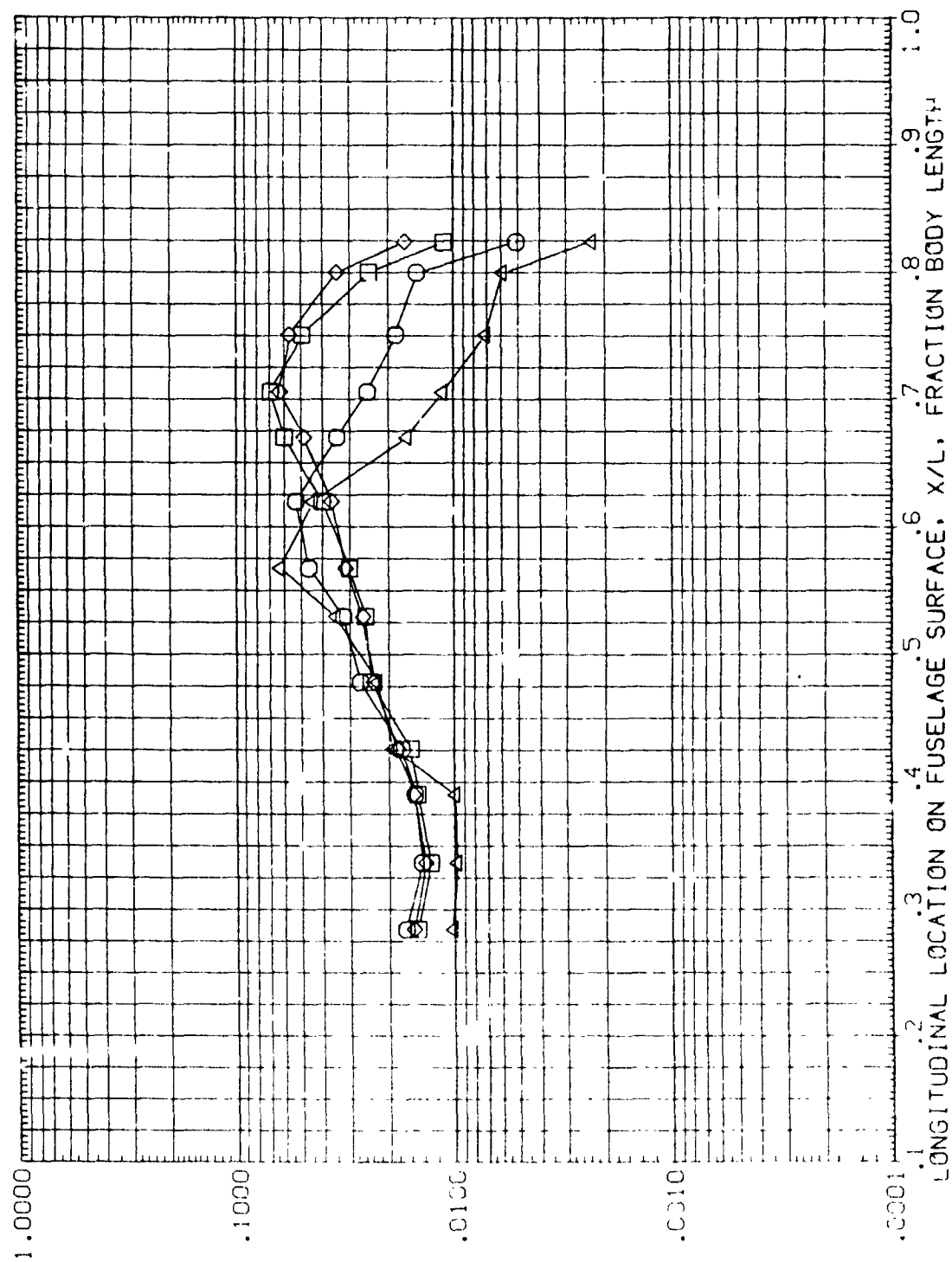


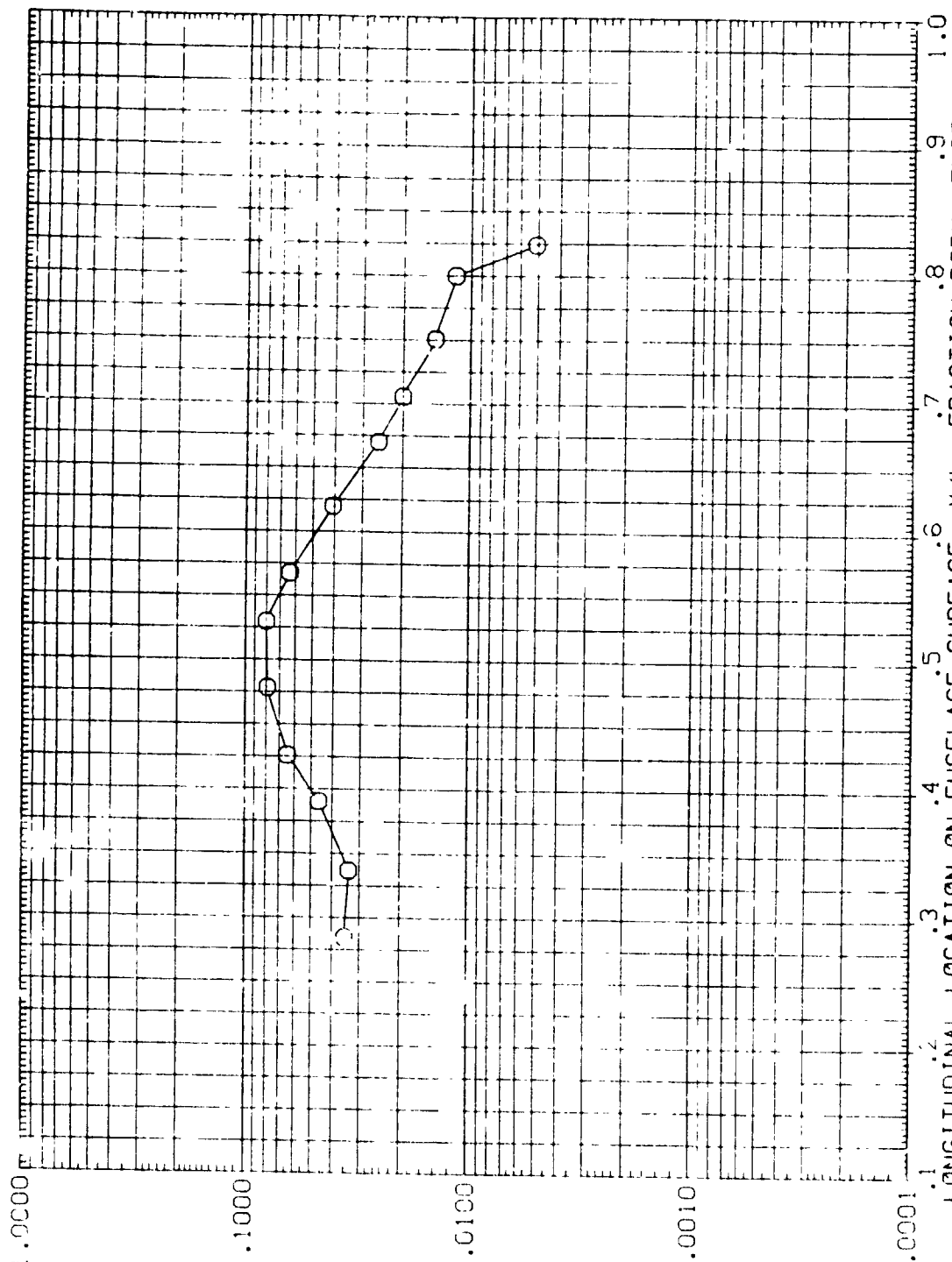
FIG. 13 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA = 2

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL RN/L TRACE ALPHA
O .445 2.000 24.950

PARAMETRIC VALUES
BF/A ELEVON .000 RUDDER .000 MACH 8.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF



LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH

FIG. 13 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR $\beta/\alpha = 2$

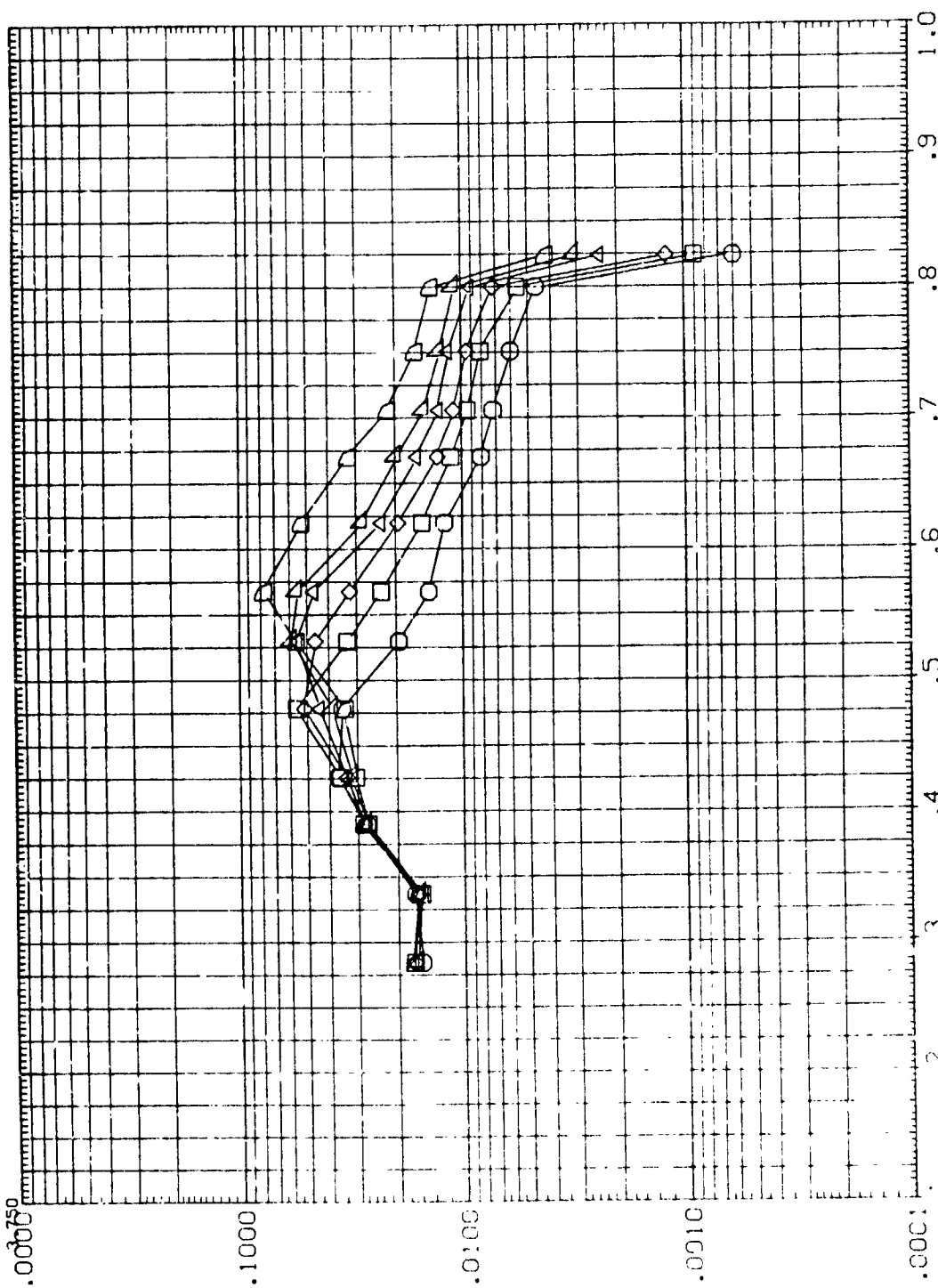
OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52:8R19 (RVB003)

PARAMETRIC VALUES
 2.000 MACH
 .000 RUDDER
 .000 ELEVON

TRACE ALPHA
 2.000 29.830

SYMBOL RN/L
 □ .445
 ◇ 1.440
 △ 1.954
 ○ 2.492
 ◻ 2.945

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF



LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH

FIG. 13 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 2

CH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL γ TRACE ALPHA 34.850

PARAMETRIC VALUES

BETA 2.000 MACH 8.000
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF

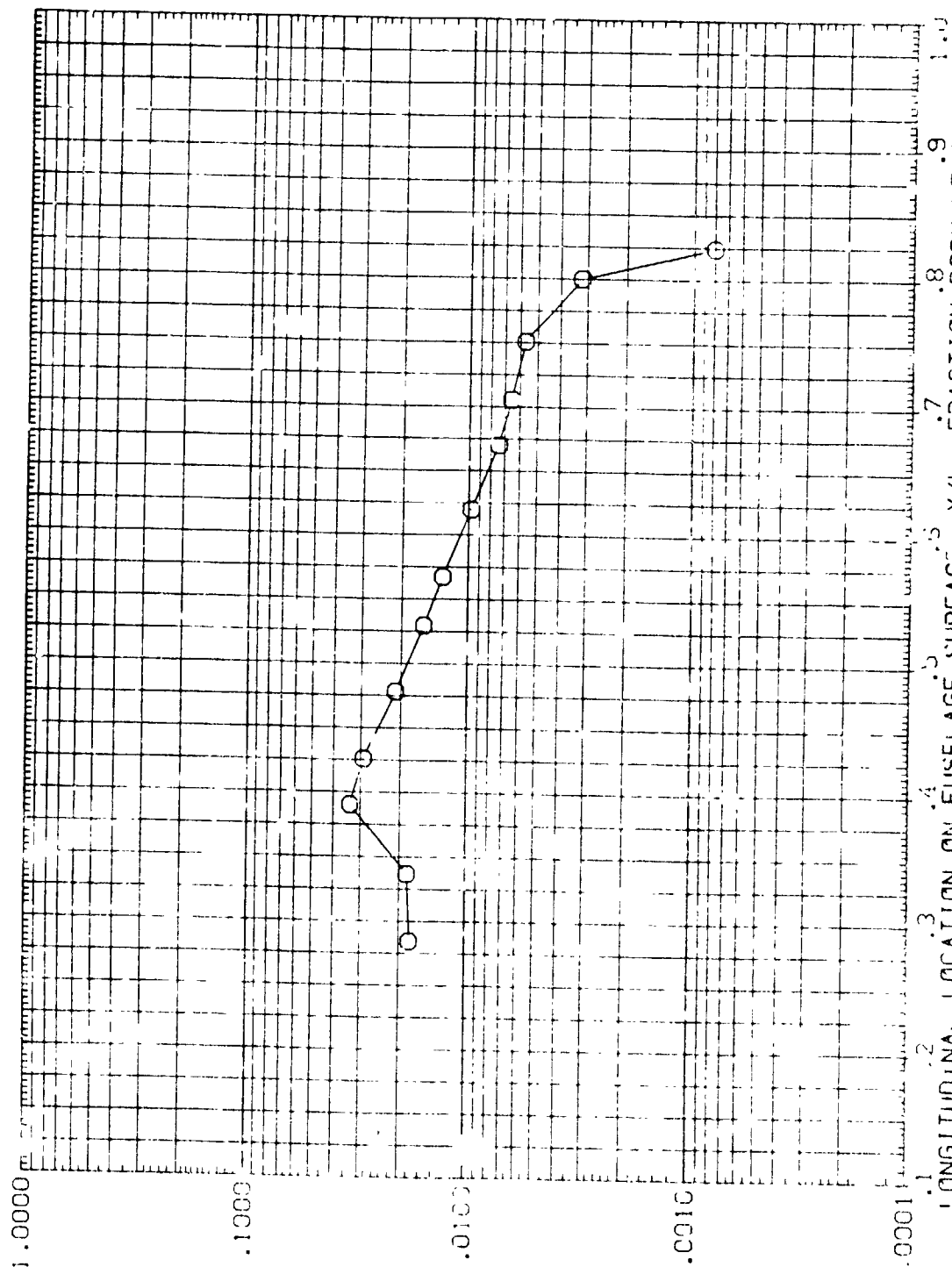


FIG. 13 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA=2

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL RN/L TRACE ALPHA
 ◊ .445
 □ 1.440
 ○ 1.954

PARAMETRIC VALUES
 BETA 2.000 MACH 8.000
 ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

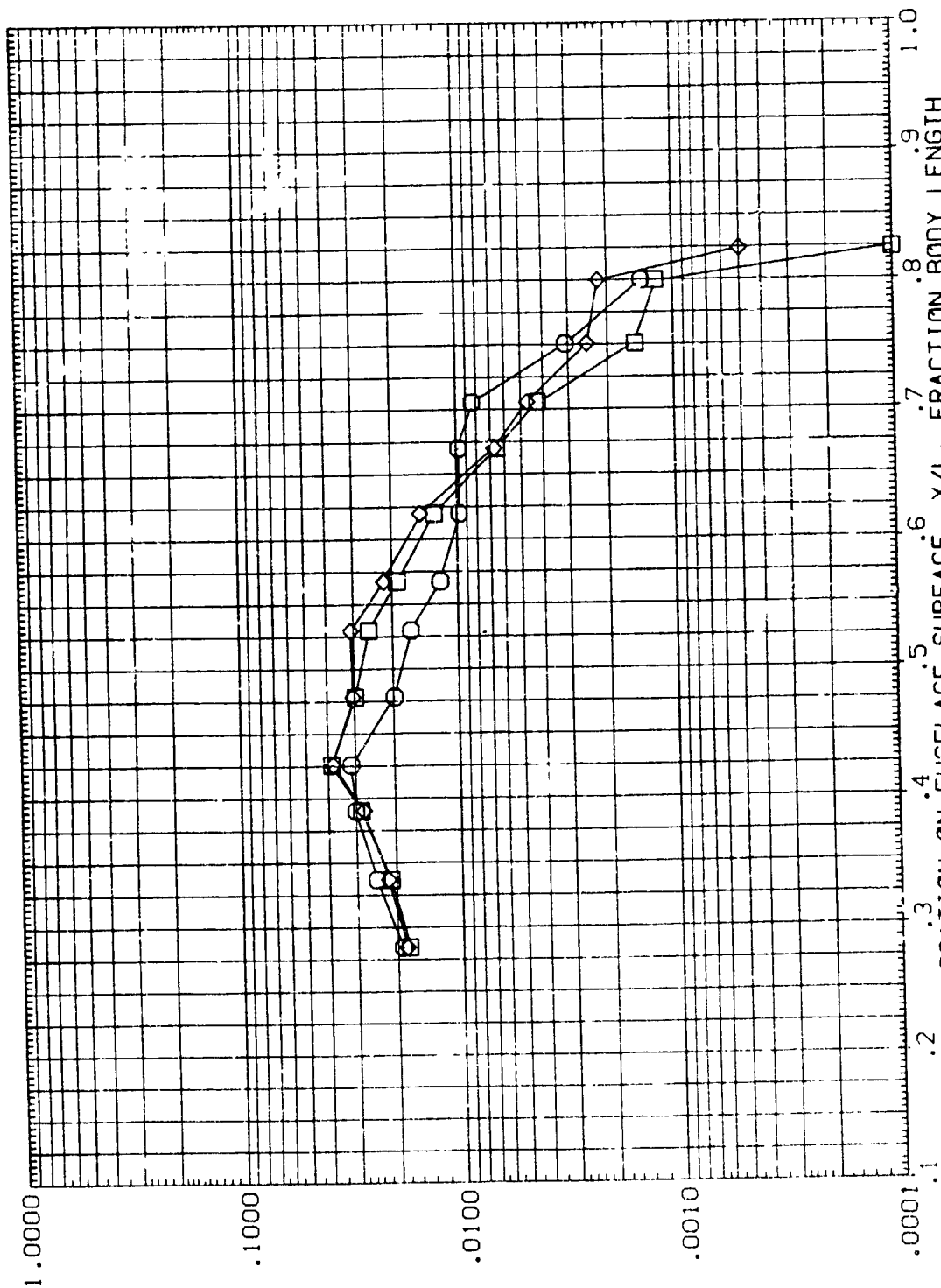


FIG. 13 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L. FRACTION BODY LENGTH
 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= 2

0H-74 CAEDC v41B-B8AJ B62C12F10M16W127E52V8R19 (RVB003)

S1 (°)	RM/L	ACE	A ₀ (°)	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
0	.445	3.000	19.840	.000	.000	.000
10	.432					
20	.345					
30	.300					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

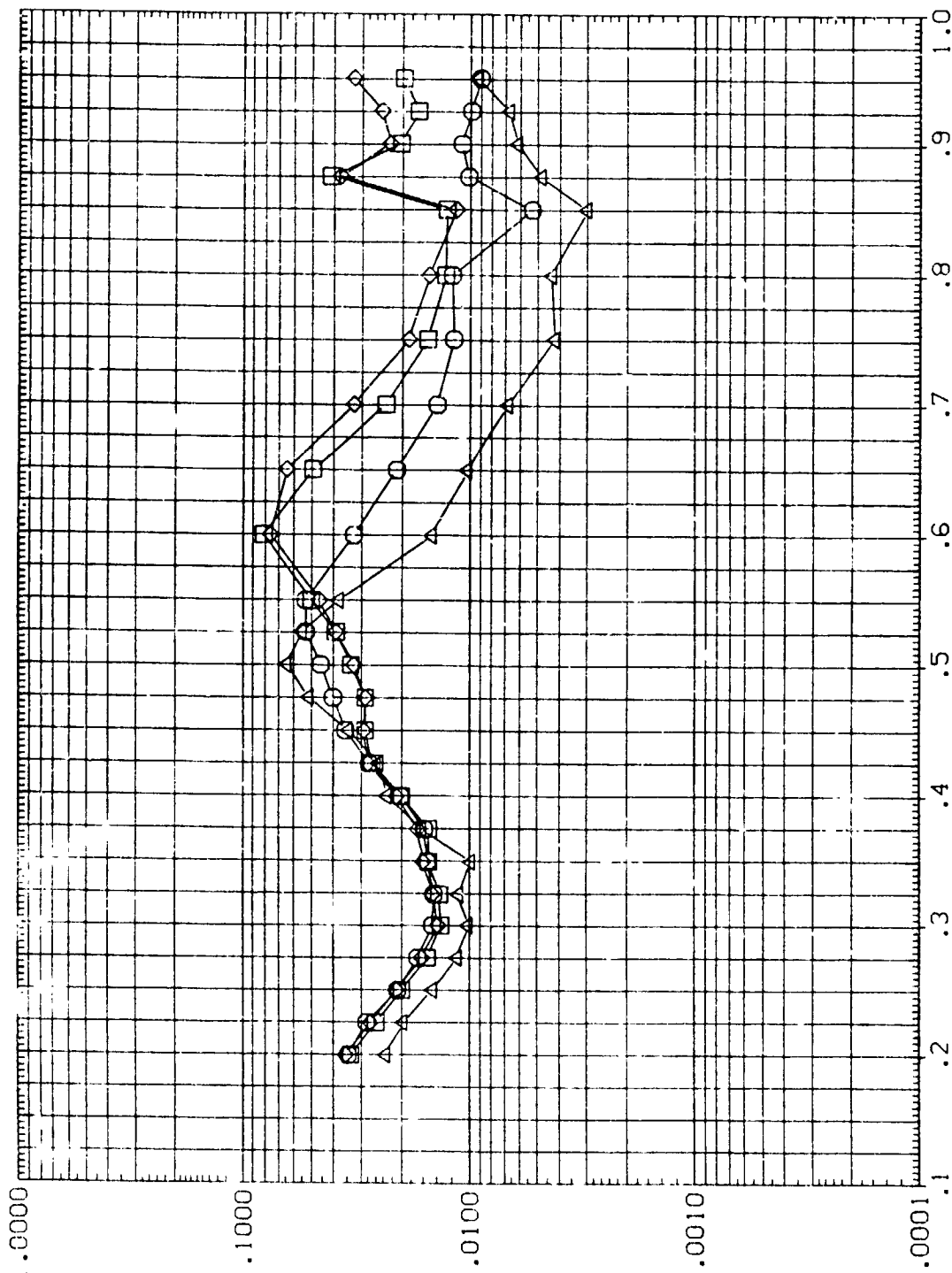


FIG. 14 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 2

SYMBOL RN/L TRACE ALPHA
 O .445 3.000 24.850

PARAMETRIC VALUES
 BETA 2.000 MACH 8.300
 ELEVON .000 RUDDER .300

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

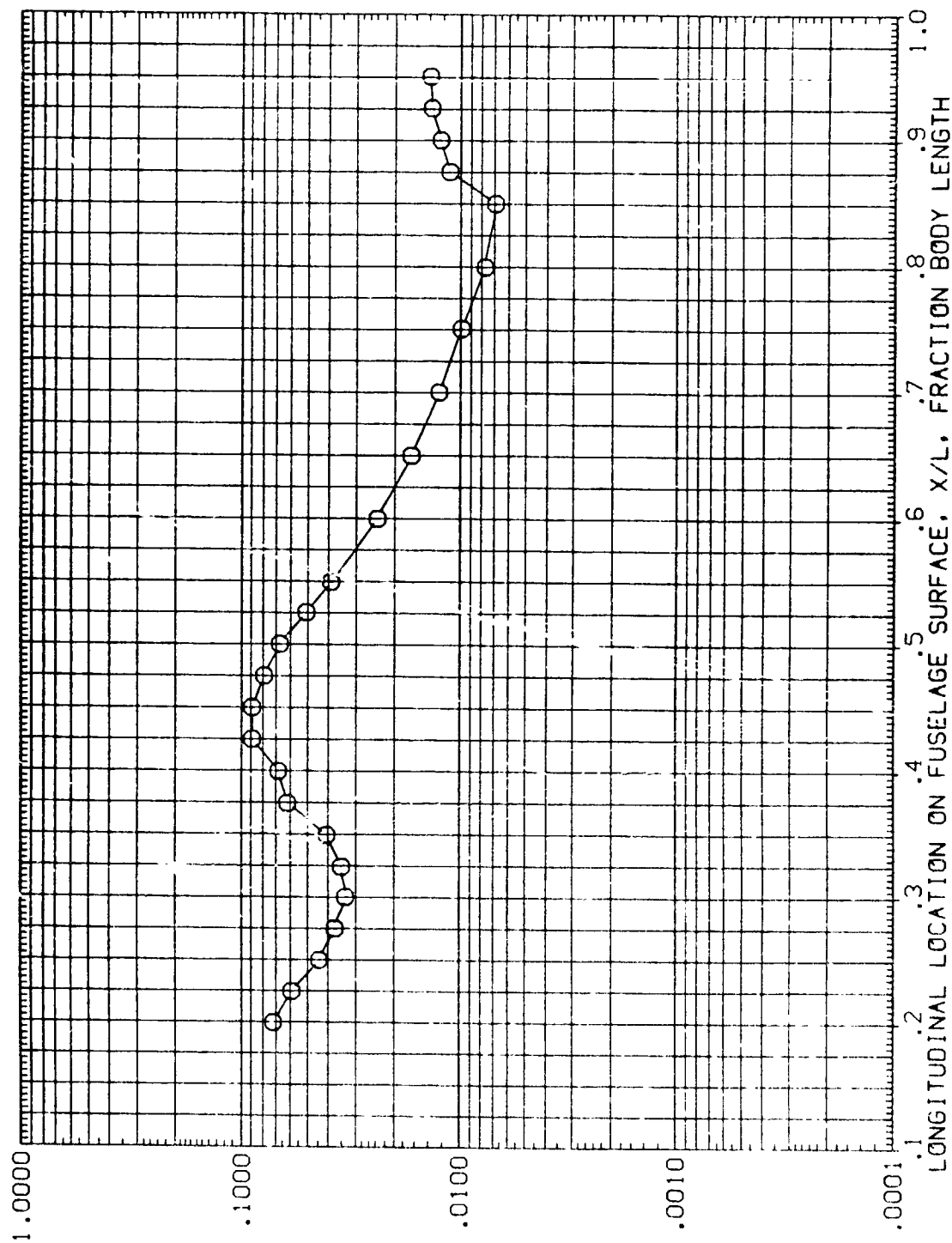


FIG. 14 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 2

OH-74 (AEDC V41B-B6A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
○	.445	3.000	29.830	ELEVON	.000	.000	8.000
□	1.440						
◇	1.954						
△	2.492						
▽	2.945						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

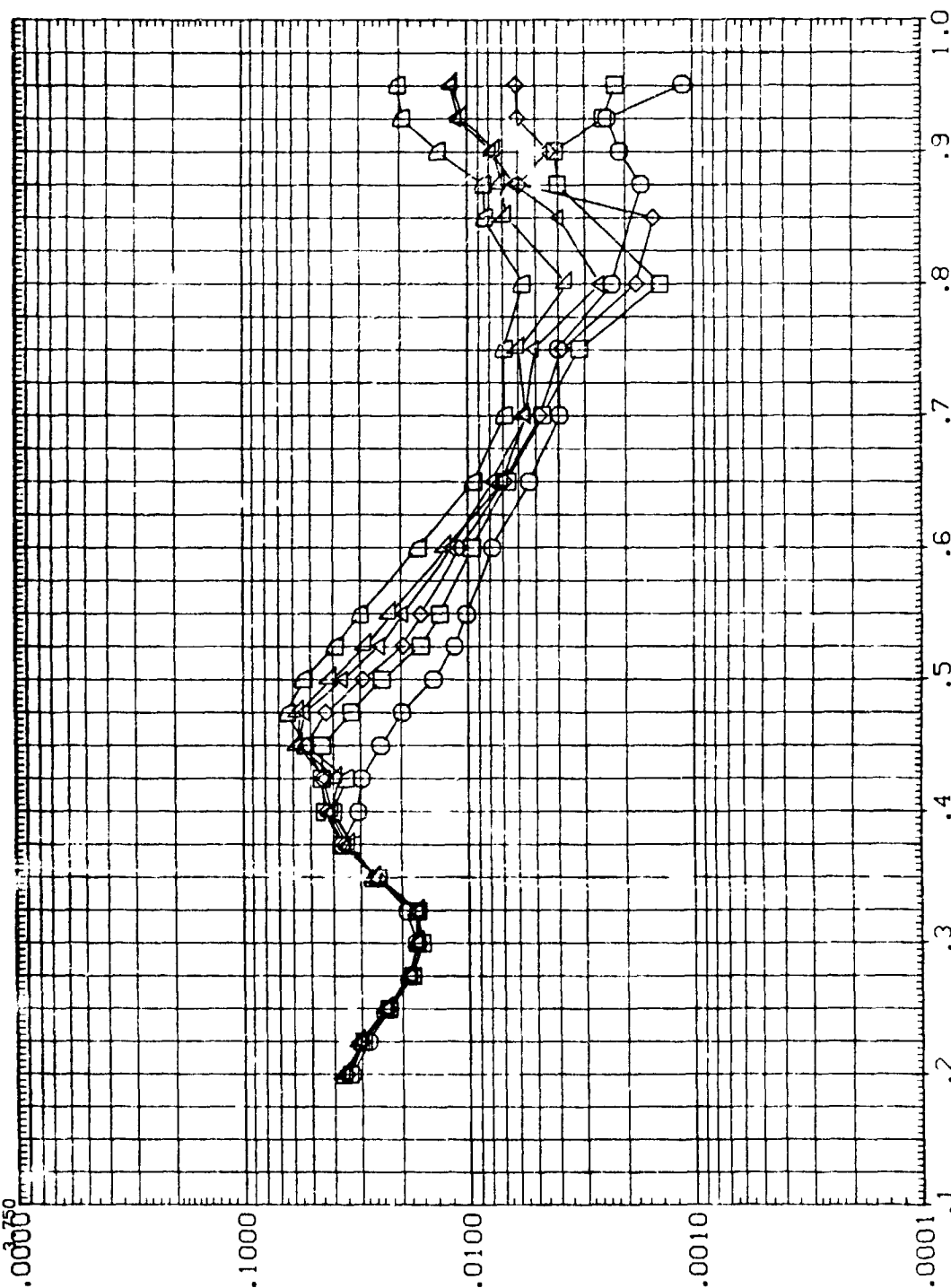
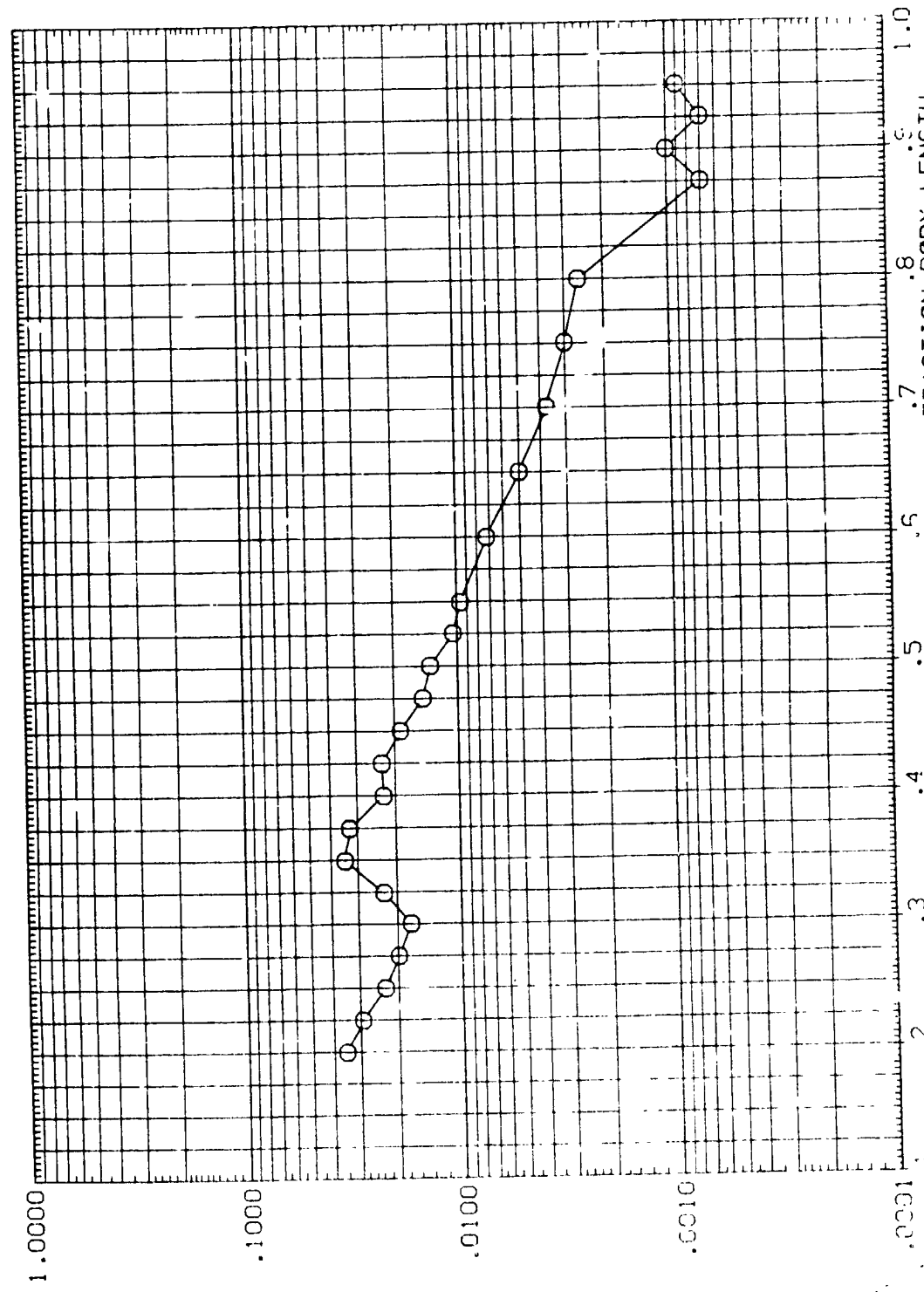


FIG. 14 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 2

QH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL	PN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
O	.445	3.000	34.850	ELEVON	.000	.000	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF



LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L. FRACTION BODY LENGTH

FIG. 14 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 2

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
○	.445	3.000	39.790	2.000	8.000		
□	1.440			.000			
◇	1.954						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

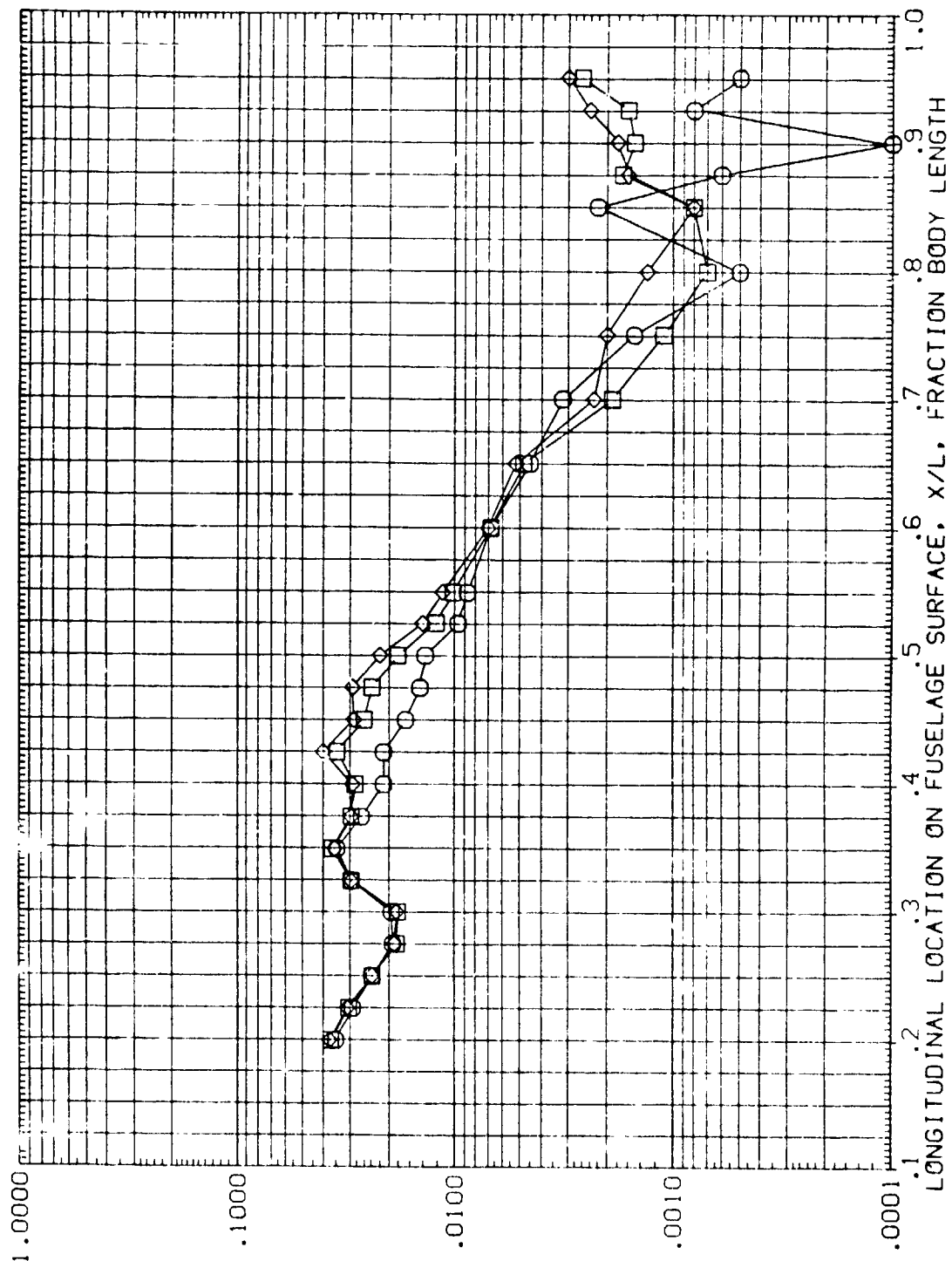


FIG. 14 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= 2

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
○	.445	4.000	15.840	ELEVON	.000	.000	
□	2.492						
◇	2.945						
△	3.750						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

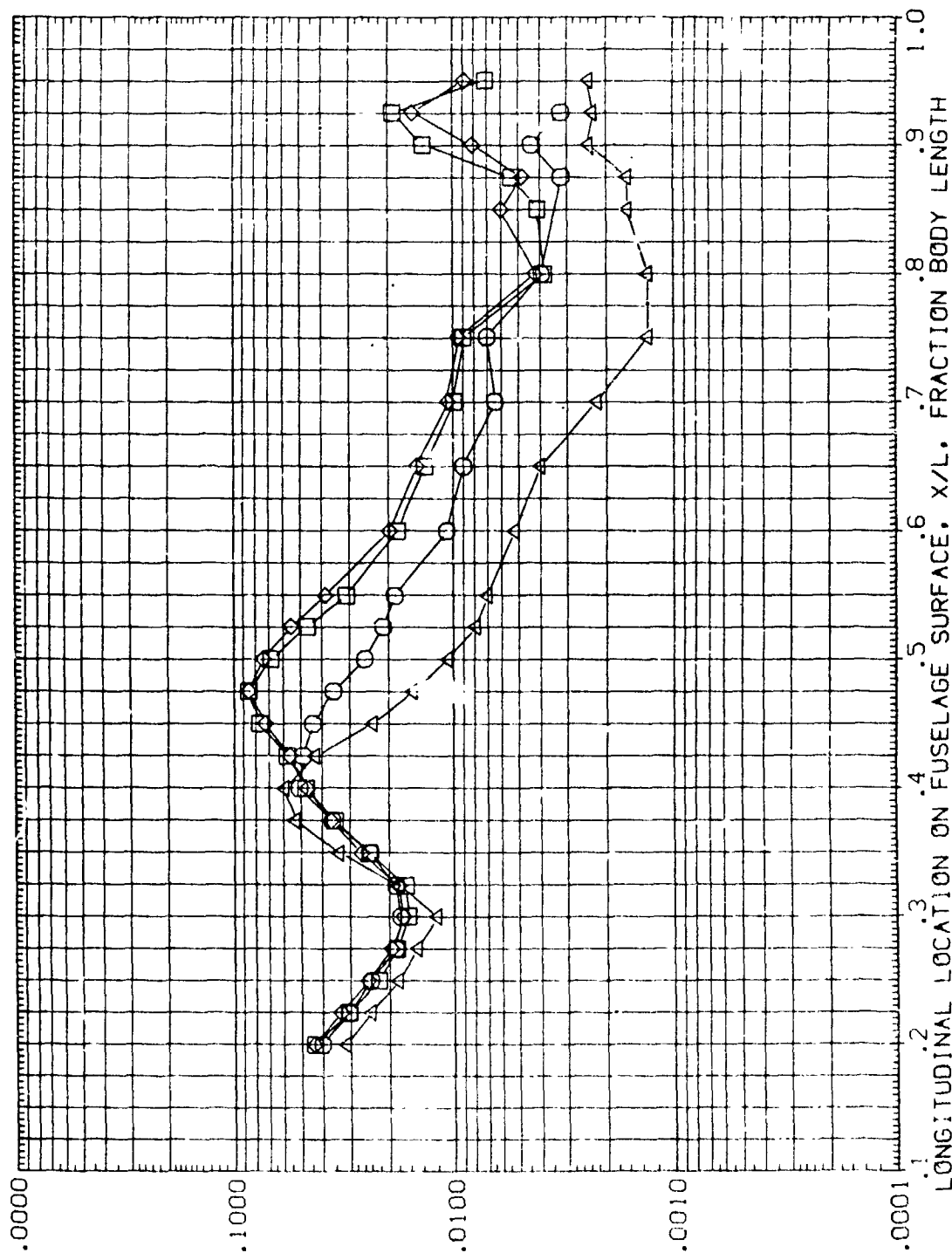


FIG. 15 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 2

PH-74 (AFPC 741B-B8A) B62C12F10M16W127E52V8R19 (R18003)

PARAMETRIC VALUES
 BETA 2.000 MACH 3.000
 ELEVON .000 RUDDER .000

FN/L 4.000 ALP 24.6.0

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

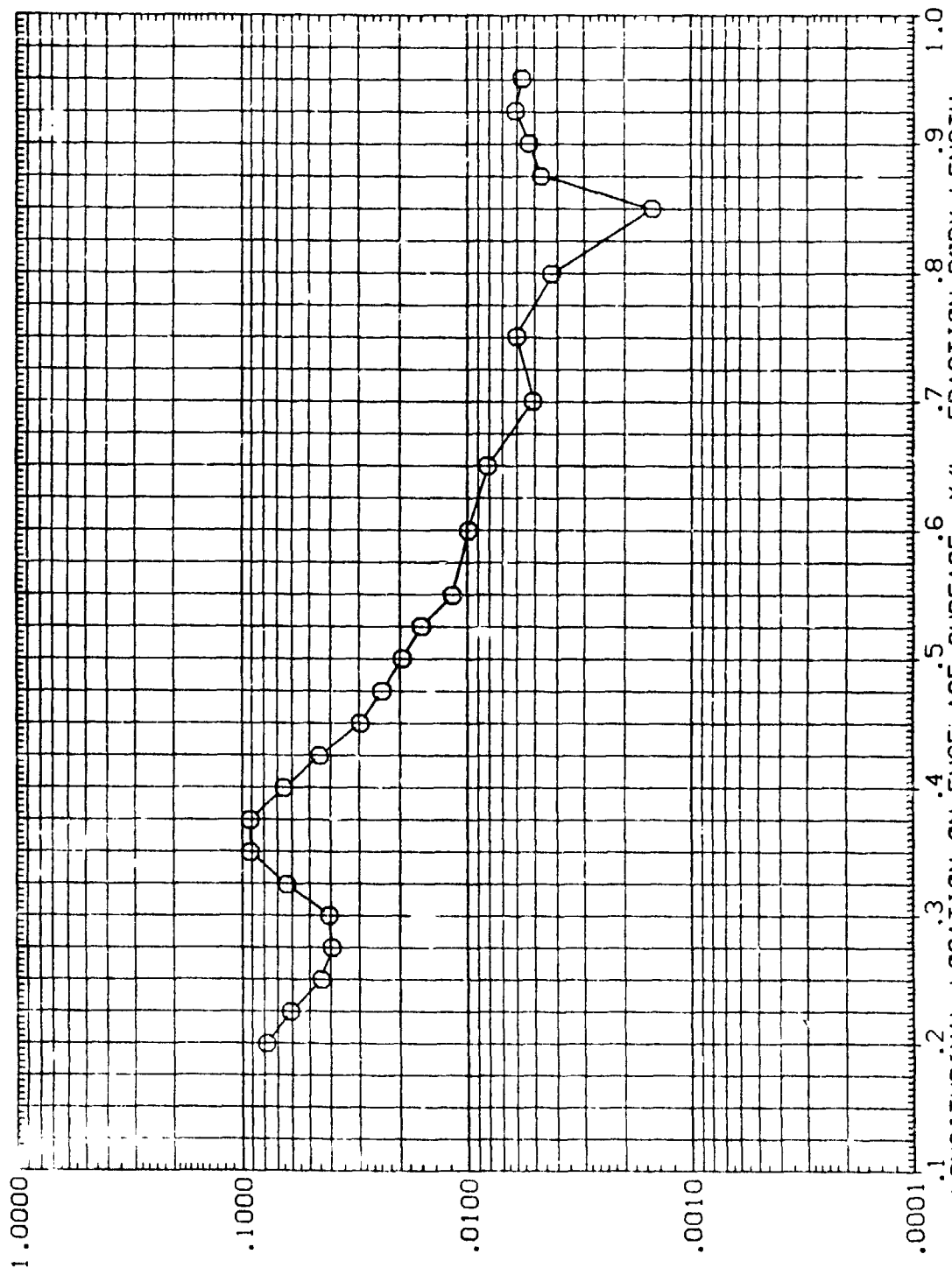


FIG. 15 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 2

PARAMETRIC VALUES
 BETA 2.000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE ALPHA
 4.000 29.830

SYMBOL RN/L
 .445
 1.440
 1.954
 2.492
 2.945

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

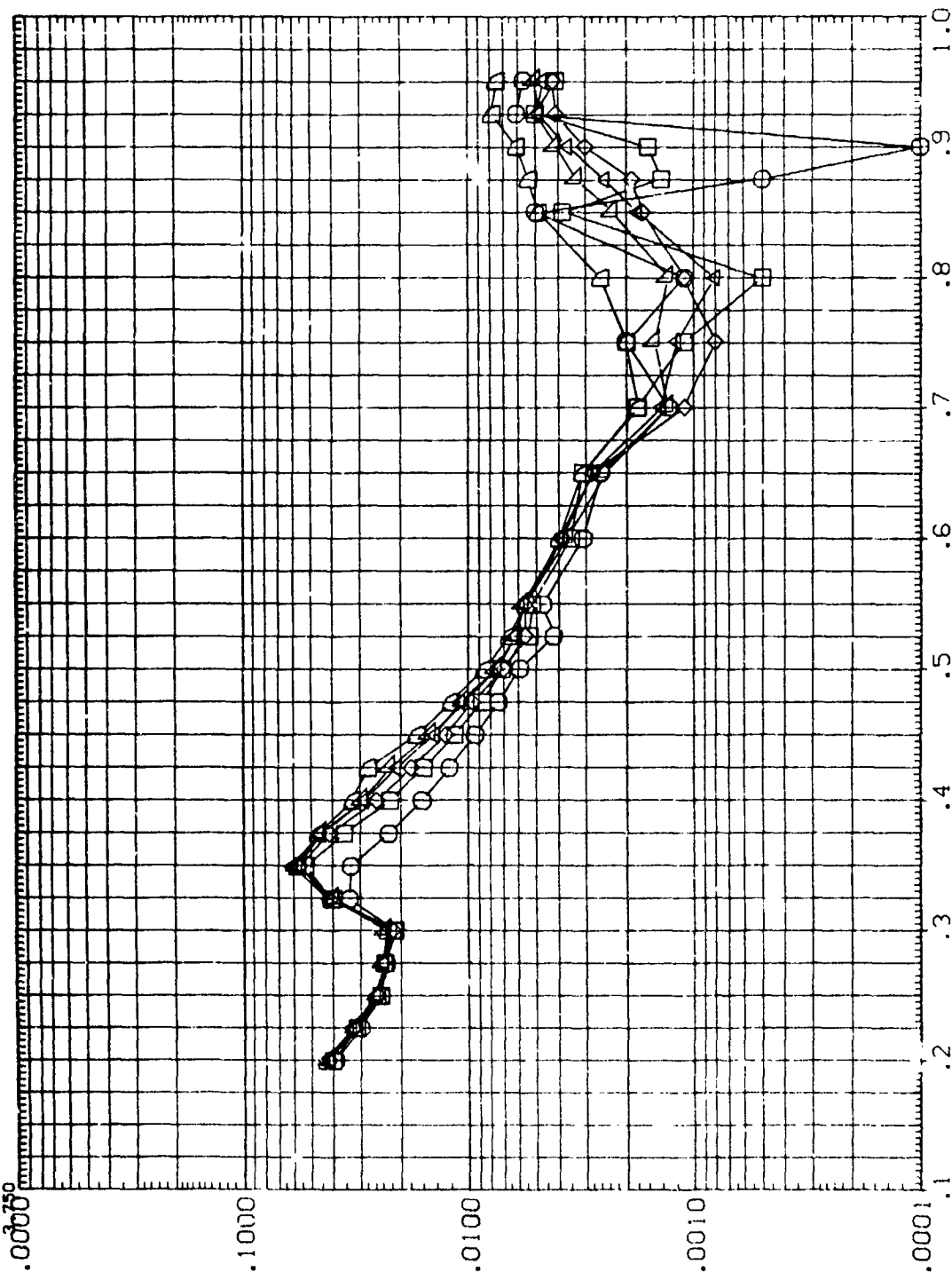


FIG. 15 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 2

0H-74 (A50C V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL	R ₁	TRACE	ALPHA	PARAMETRIC VALUES		
○	.45	4.000	34.850	BETA	2.000	MACH
				ELEVON	.000	RUDDER
					.000	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

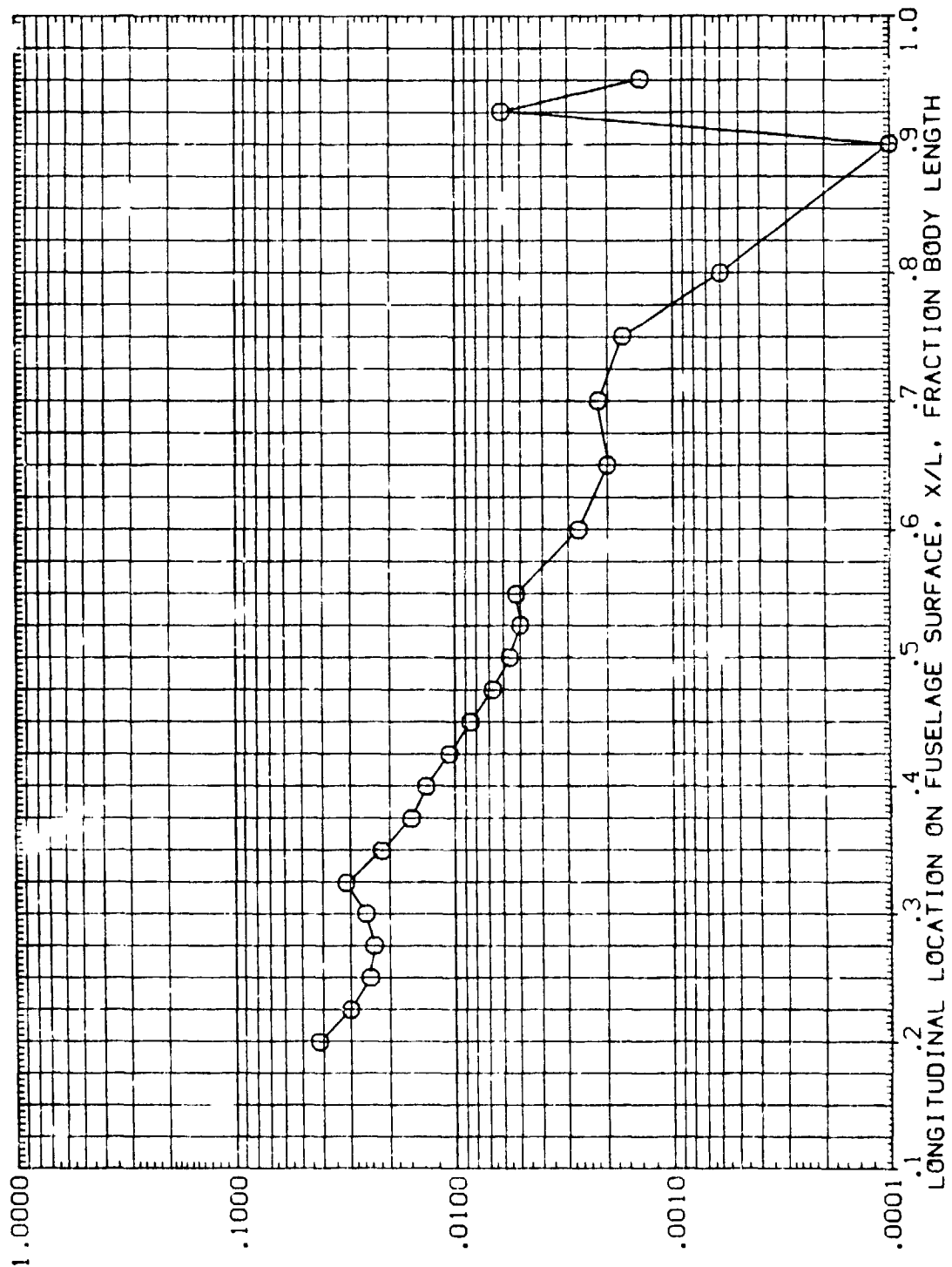


FIG. 15 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 2

REPRODUCTION OF THIS DOCUMENT IS PROHIBITED
ORIGINAL PAGE IS POOR

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB003)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
○	.445	4.000	39.790	.000	8.000	.000
□	1.440					
◇	1.954					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

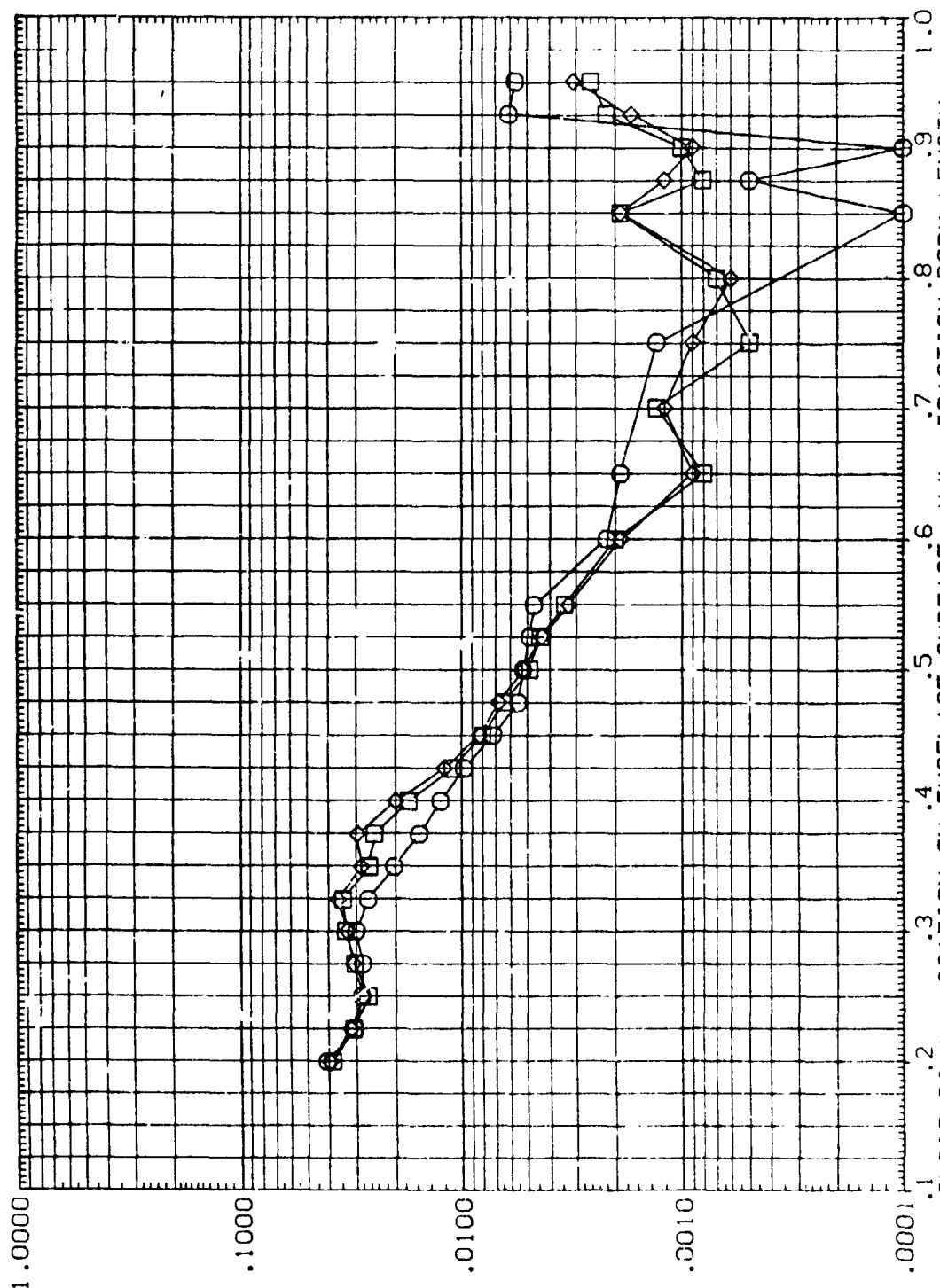


FIG. 15 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= 2

01-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB004)

SYMBOL	RN/L	TRACE	ALPHA	BETA	PARAMETRIC VALUES
O	.4	1.000	19.7,0	ELEVON	-1.000 MACH .000 RUJER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

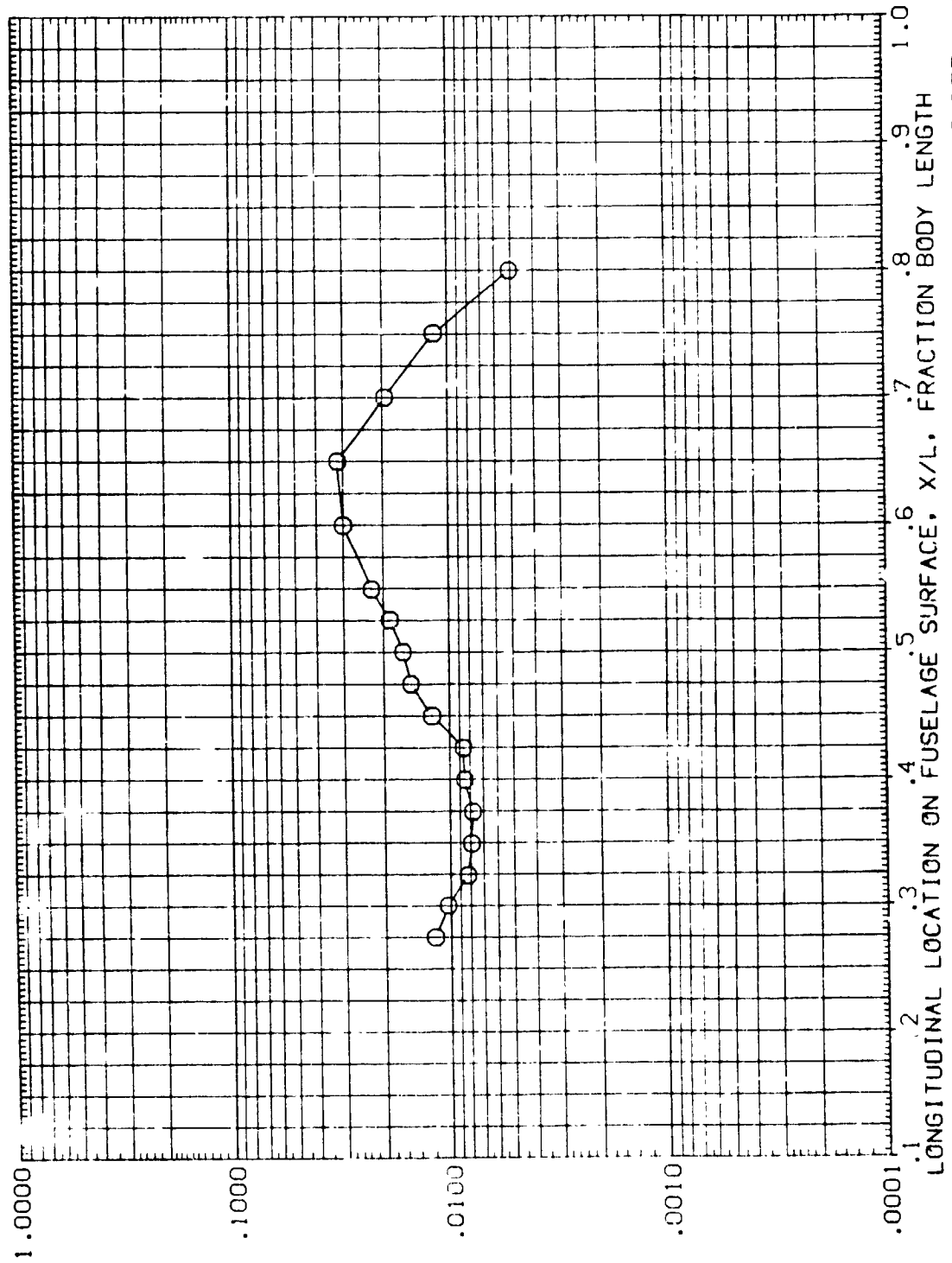


FIG. 16 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=-1

SYMBOL O	RN/L .463	TRACE 1.000	ALPHA 24.970	PARAMETRIC VALUES		
				BETA ELEVON	MACH .000	RUDDER 8.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

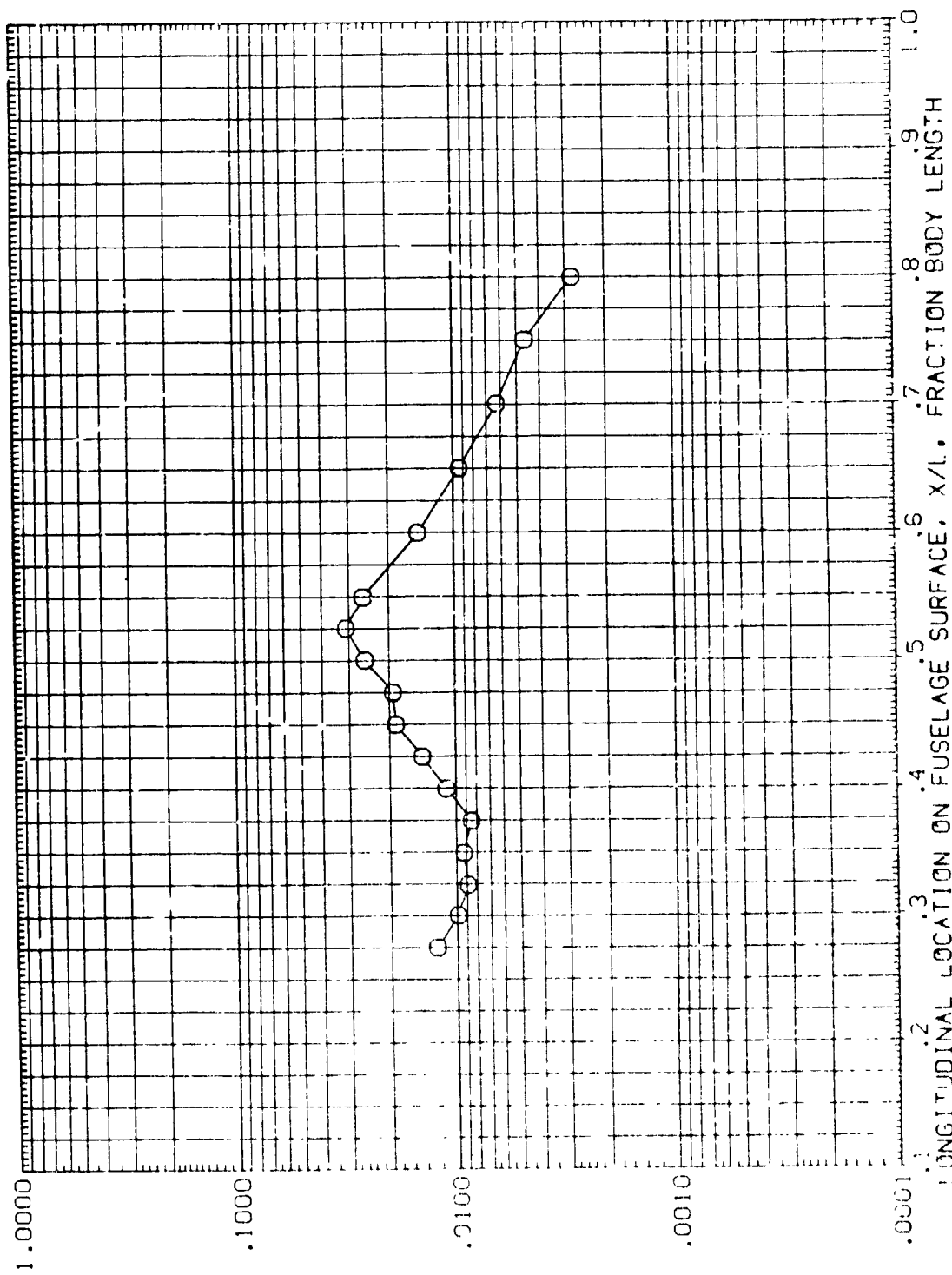


FIG. 16 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=1

OH-74 (AEDC V41B-38A) B62C12F10M16W127E52V8R19 (RVB0004)

SYMBOL	P	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
□	.93	1.000	29.830	-1.000	.000	8.000	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF

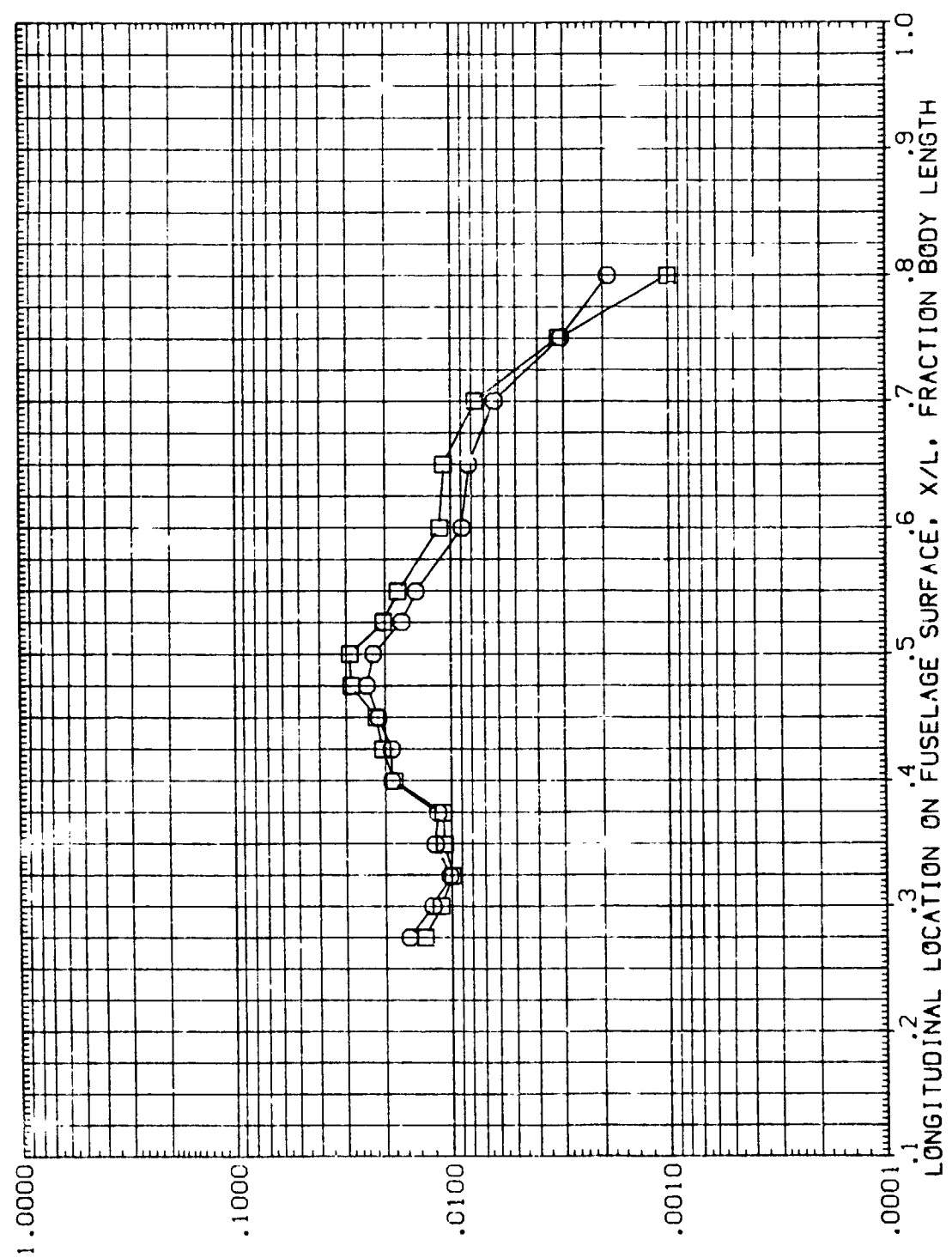


FIG. 16 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=-1

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

QH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB004)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
□	.463	1.000	34.740	-1.000	8.000	.000	
○	.939						

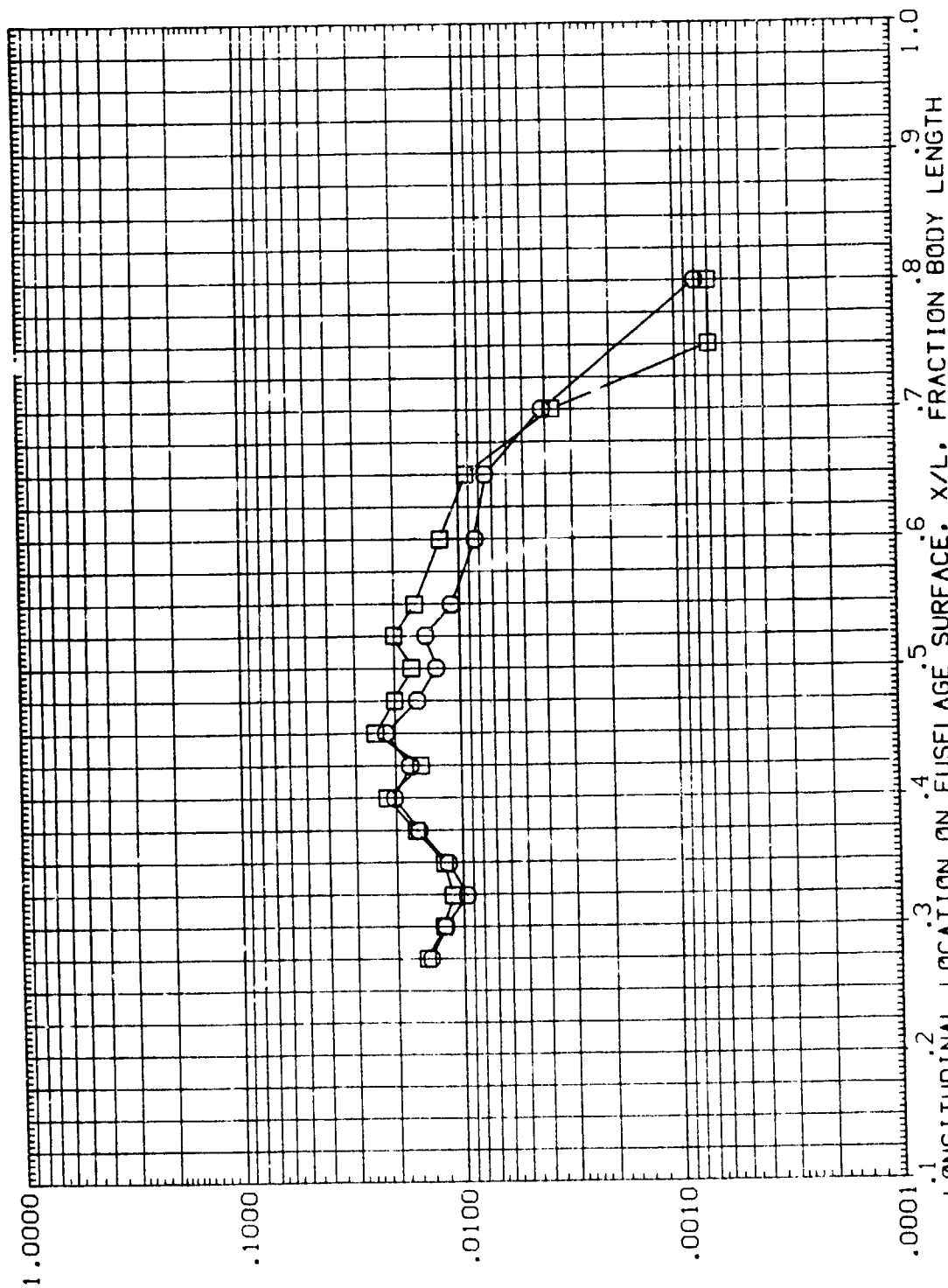


FIG. 16 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA = -1

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB004)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
○	.939	1.000	39.860	BETA	MACH	8.000
				ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

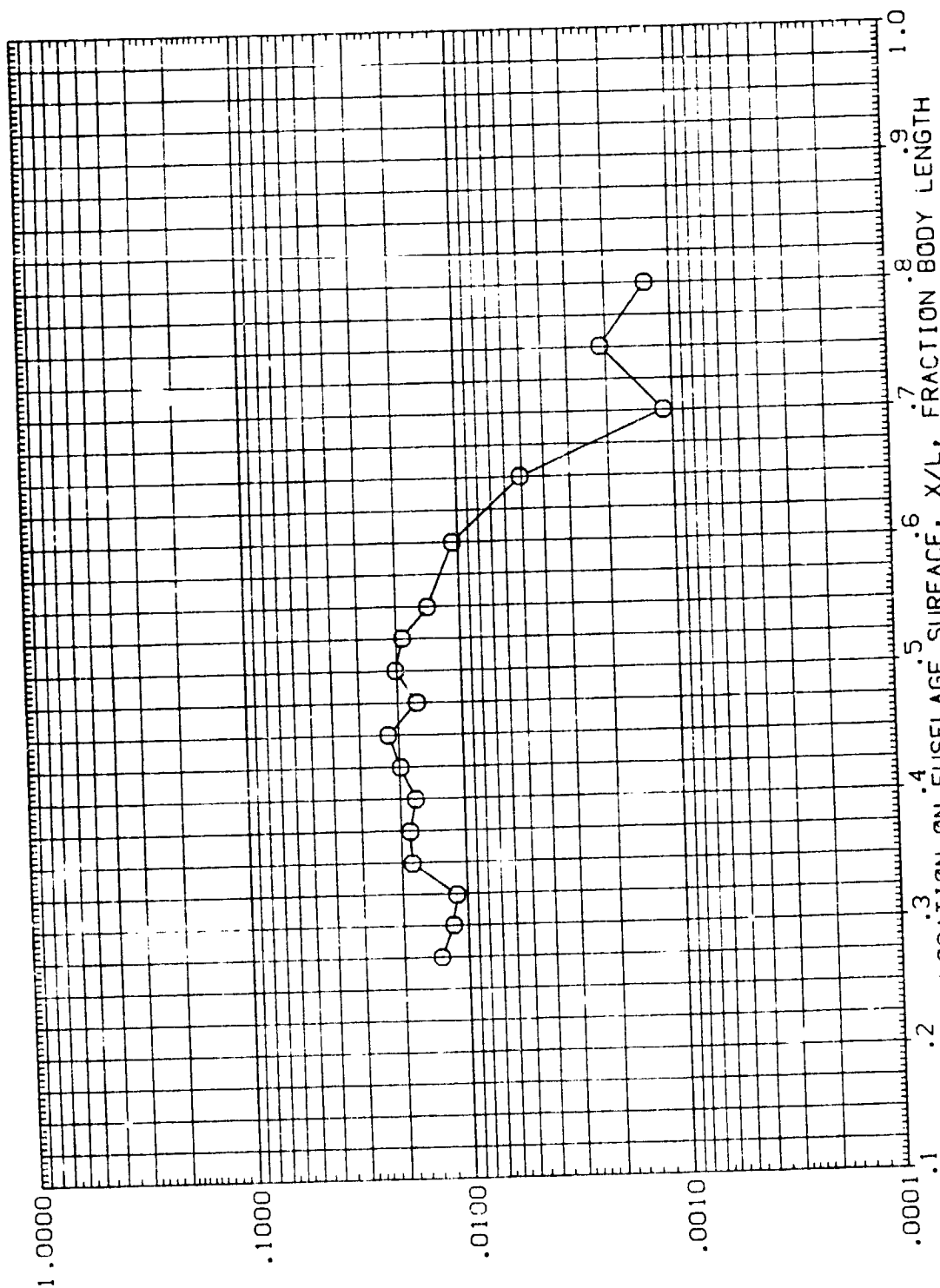


FIG. 16 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH
HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, $\beta = -1$

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB004)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
□	.463	1.000	43.840	BETA	MACH	8.000
○	.939			ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

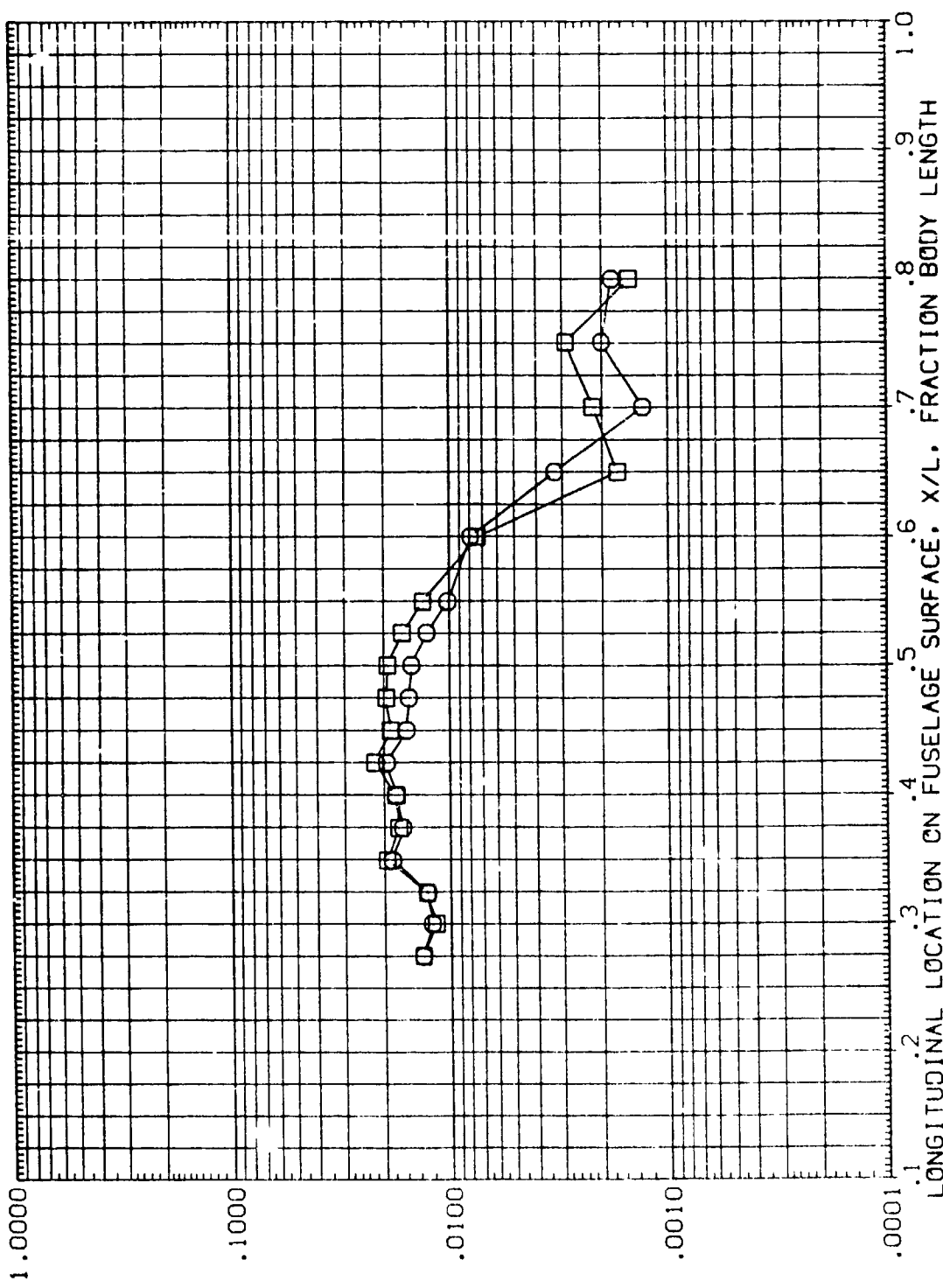


FIG. 16 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L. FRACTION BODY LENGTH
HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=-1

GH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB0004)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
O	.463	2.000	19.710	-1.000	.000	.000	8.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

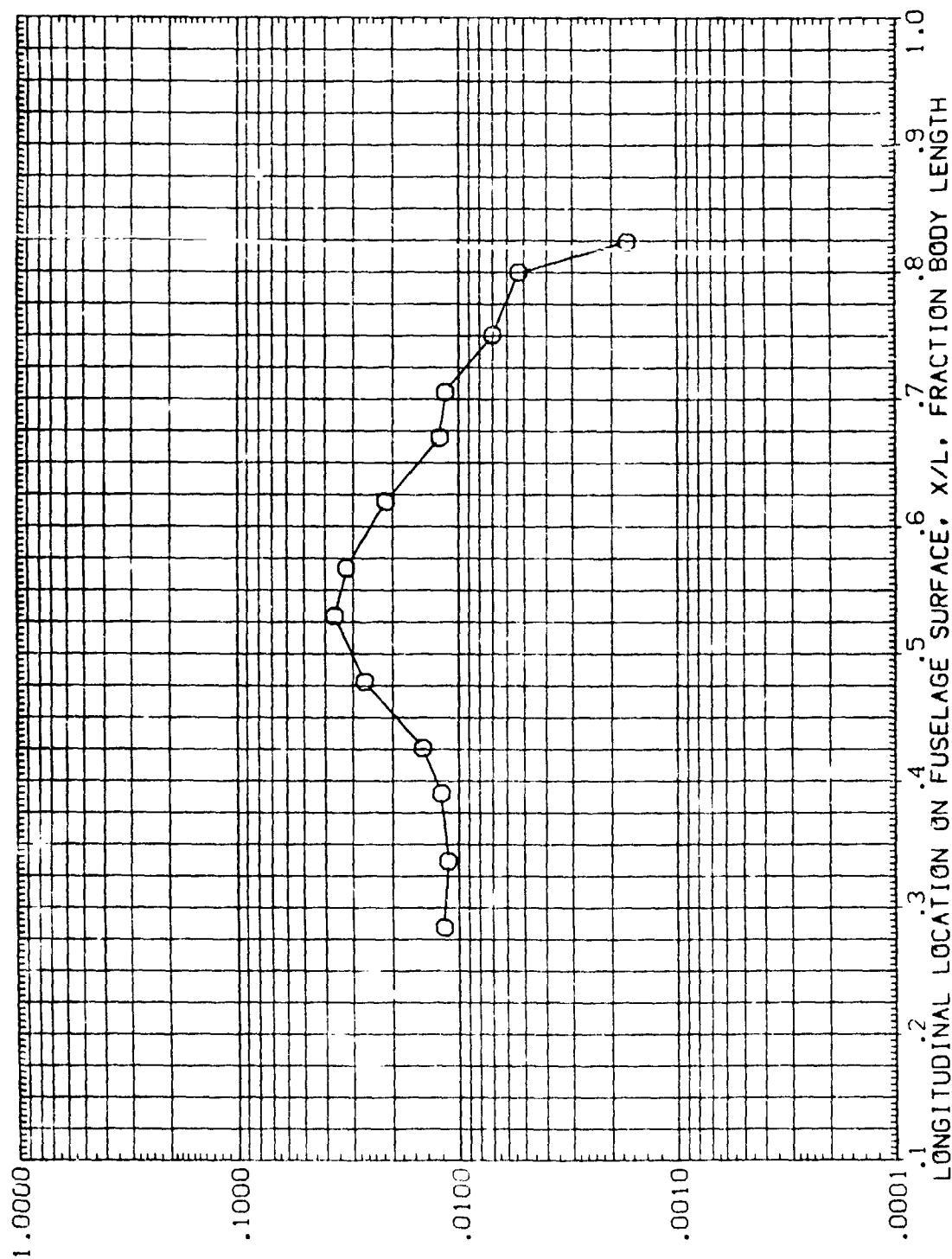


FIG. 17 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA = -1

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB004)

SYMBOL O	RN/L .463	TRACE 2.000	ALPHA 24.970	PARAMETRIC VALUES		
				BETA ELEVON	MACH .000	RUDDER 8.000

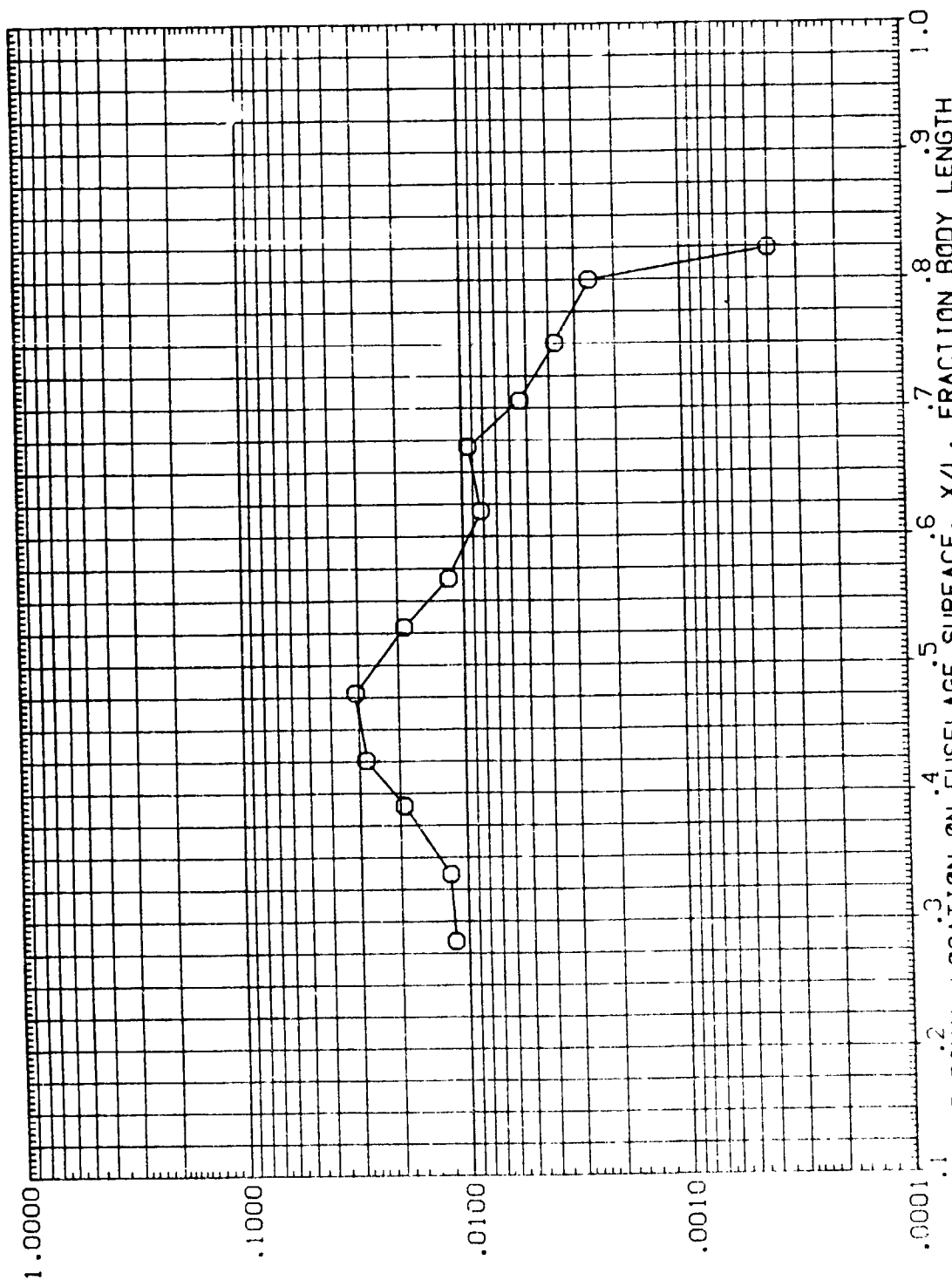


FIG. 17 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA = -1

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB004)

PARAMETRIC VALUES
 BETA -1.000 MACH 8.000
 ELEVON .000 RUDDER .000

SYMBOL □
 PN/L .403
 TRACE 2.000 ALPHA 29.830

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

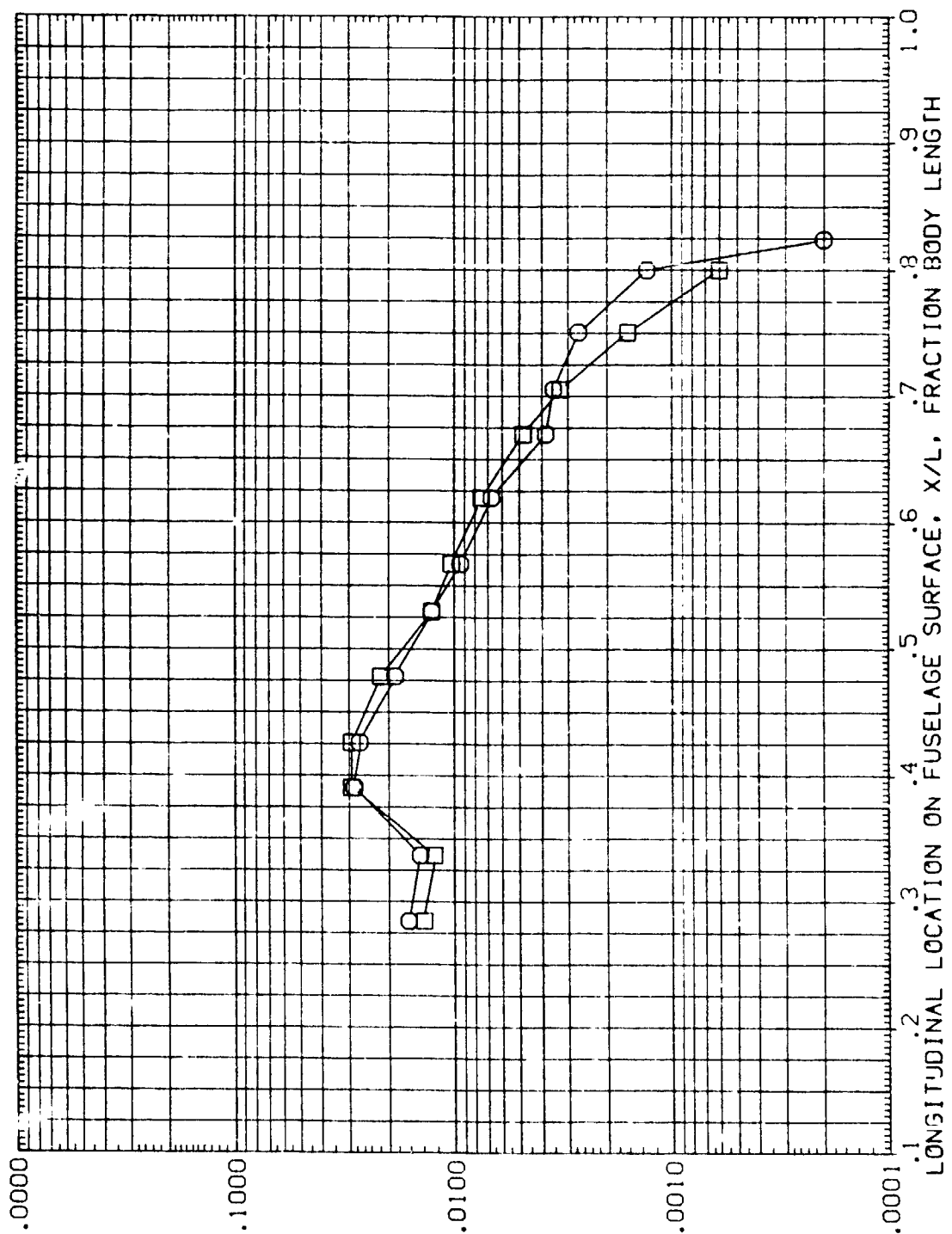


FIG. 17 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= -1

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB004)

SYMBOL	RN/L	TRACE	AL	34.4°C	PARAMETRIC VALUES		
					BETA	MACH	8.000
□	.463	2.050		ELEVON	.000	RUDDER	.000
□	.939						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF

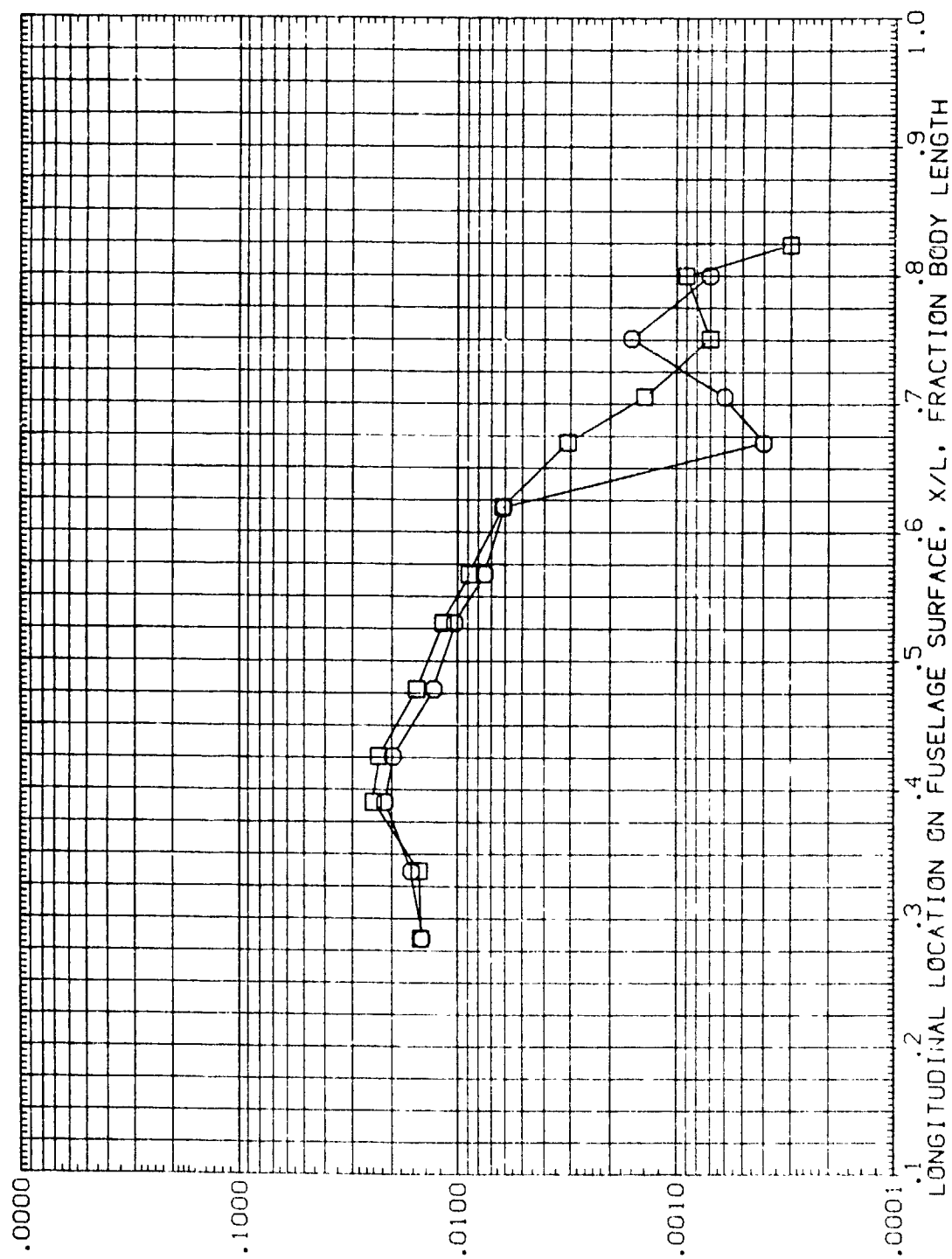


FIG. 17 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA = -1

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB0004)

SYMBOL O	RN/L .939	TRACE 2.000	ALPHA 39.860	PARAMETRIC VALUES			
				BETA ELEVON	-1.000	MACH .000	8.000 RUDDER

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/REF

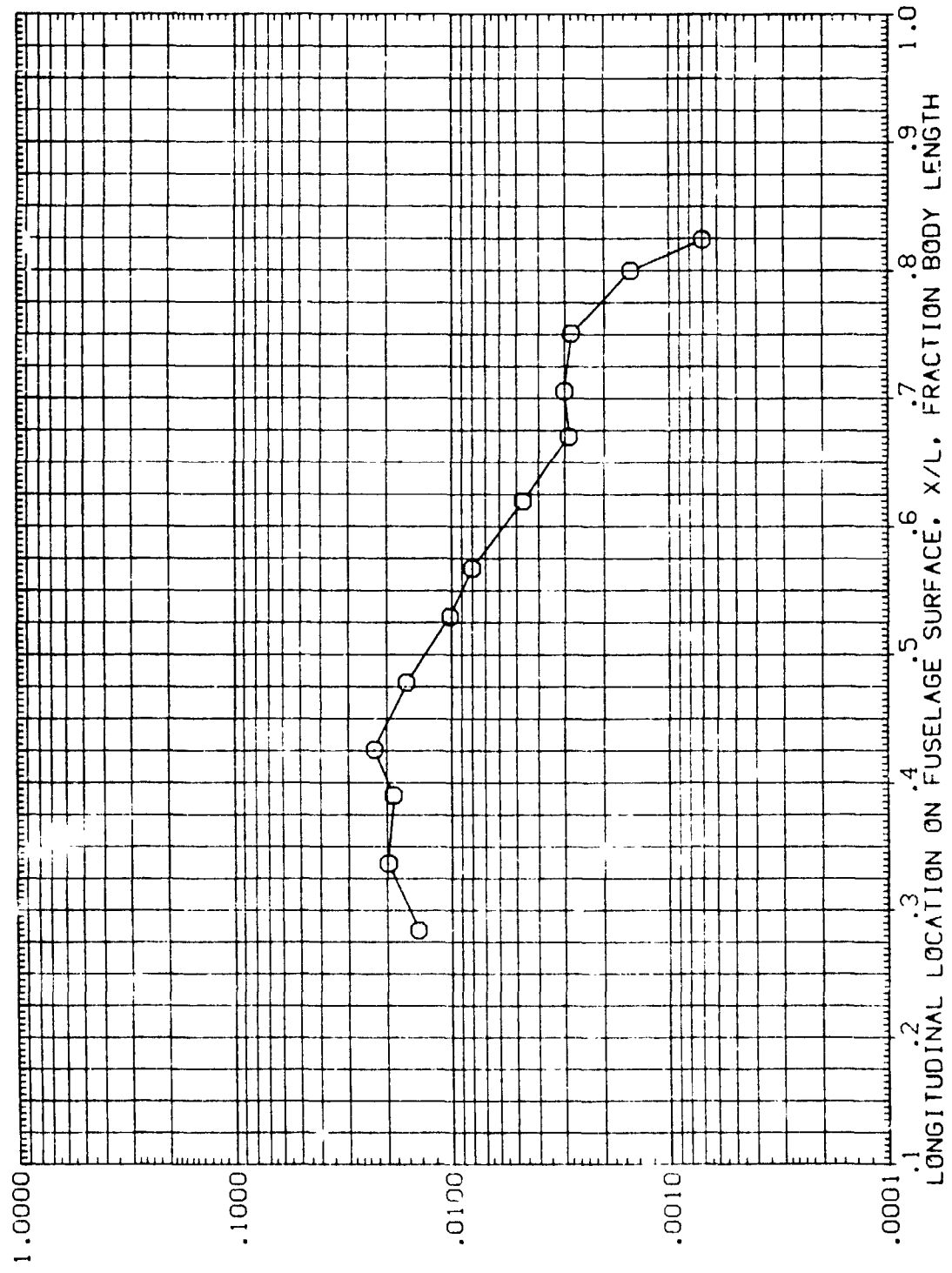


FIG. 17 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA = -1

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
□	.463	2.000	43.840	BETA	MACH	8.000
□	.939			ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

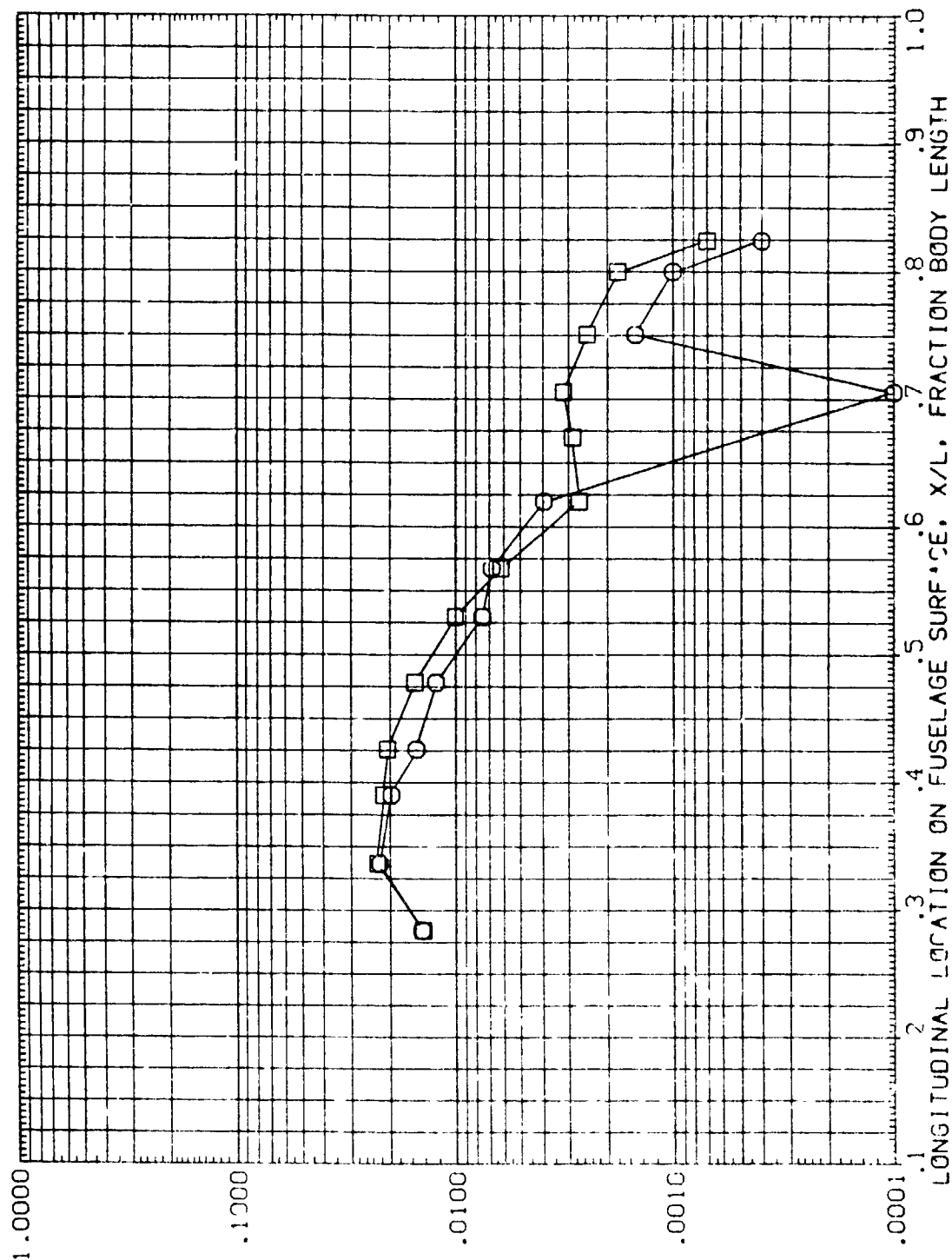


FIG. 17 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA= -1

OH-74 (AEDC 7418-B8A) B62C12F10M16W127E52V8R19 (RVB004)

SYMBOL \bigcirc RM/L .4.3 TRACE ALPHA 19.710

PARAMETRIC VALUES
BETA -1.000 MACH 8.000
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

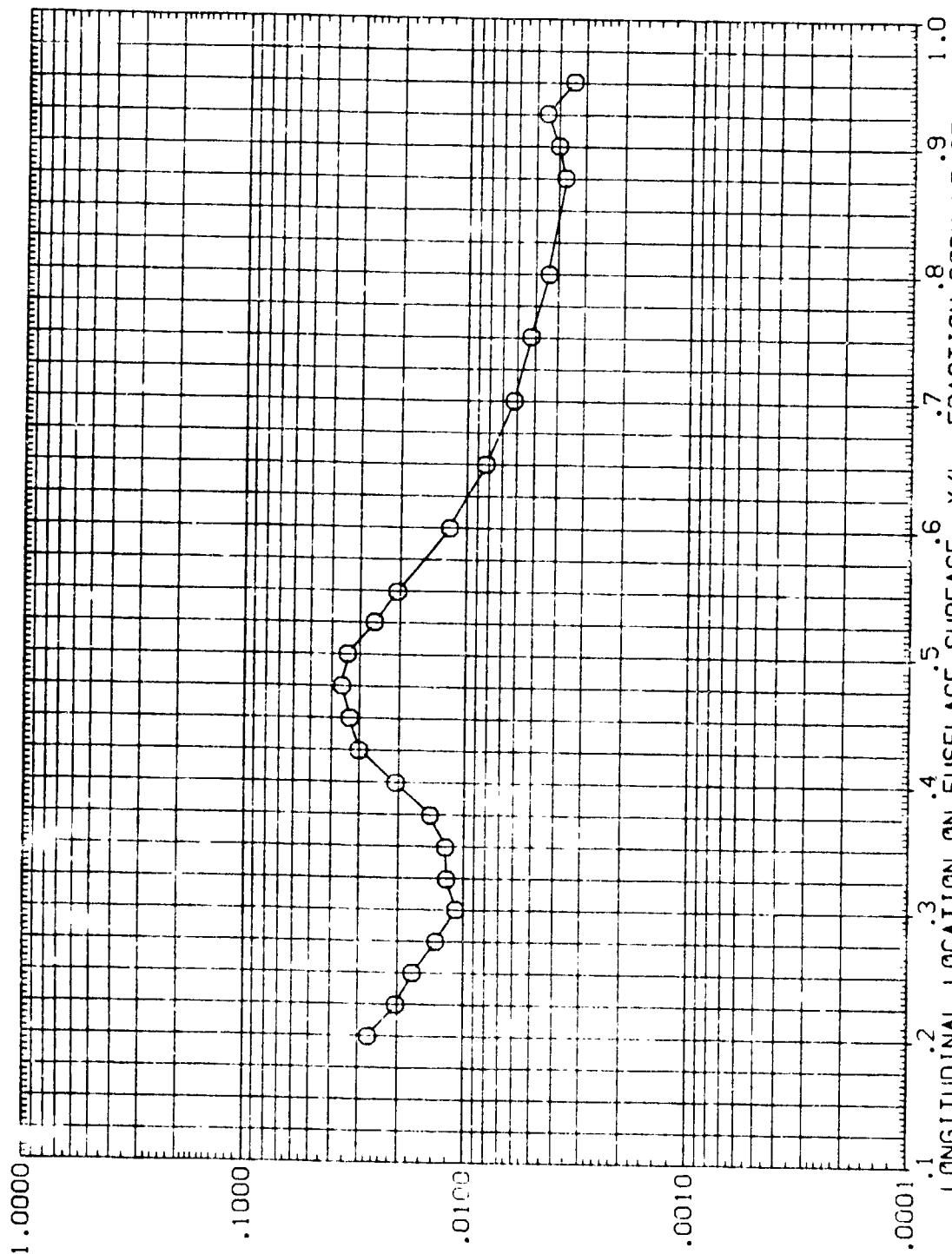


FIG. 18 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA = -1

SYMBOL RN/L TRACE ALPHA
 O .463 3.000 24.970

PARAMETRIC VALUES
 BETA ELEVON .000
 MACH RUDDER .000

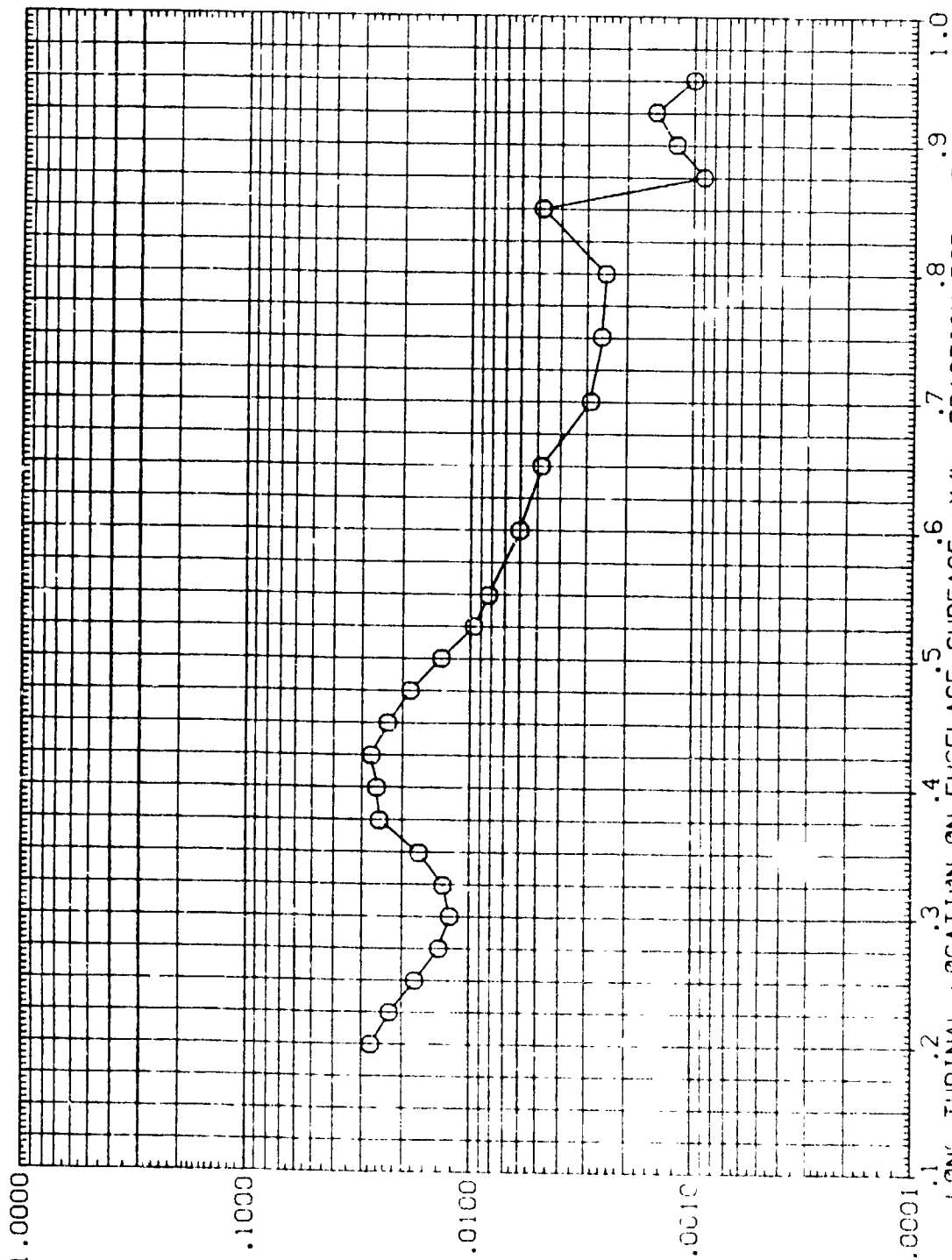


FIG. 18 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA = -

CH-1 (AEDC V41B-88A) B62C12F10M16W127E52V8R19 (RV8004)

SYMBOL	RN/L	TRACE	ALP _{max}	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
□	.40J .939	3.000	29.830	-1.000	.000	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

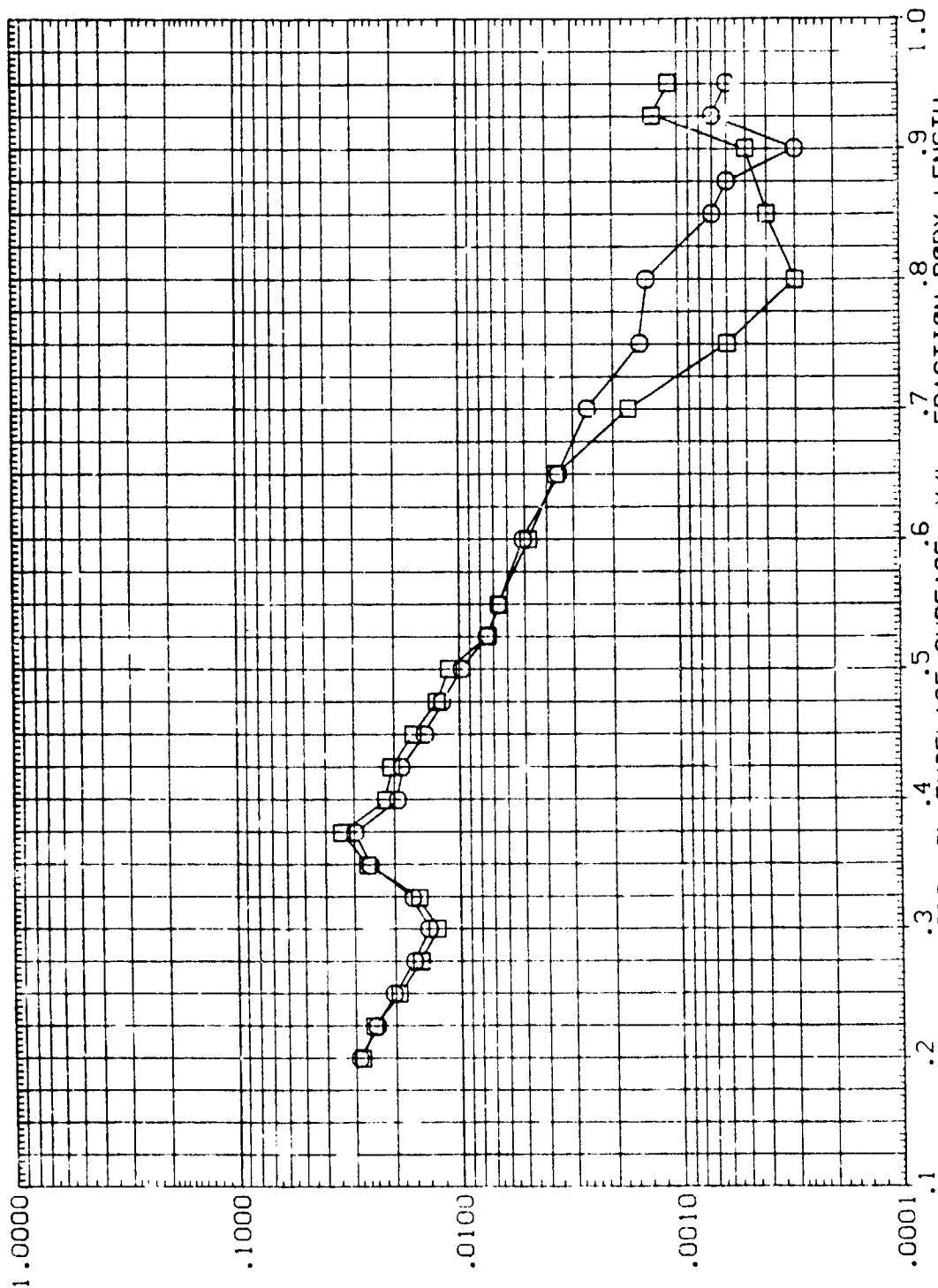


FIG. 18 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= -1

REPRODUCIBILITY OF THE
ORIGINAL FILE IS POOR

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB0004)

SYMBOL	RV/L	TRACE	ALPHA	BETA	PARAMETRIC VALUES
□	.463	3.000	34.740	ELEVON	-1.000 MACH .000 RUDDER .000
○	.939				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

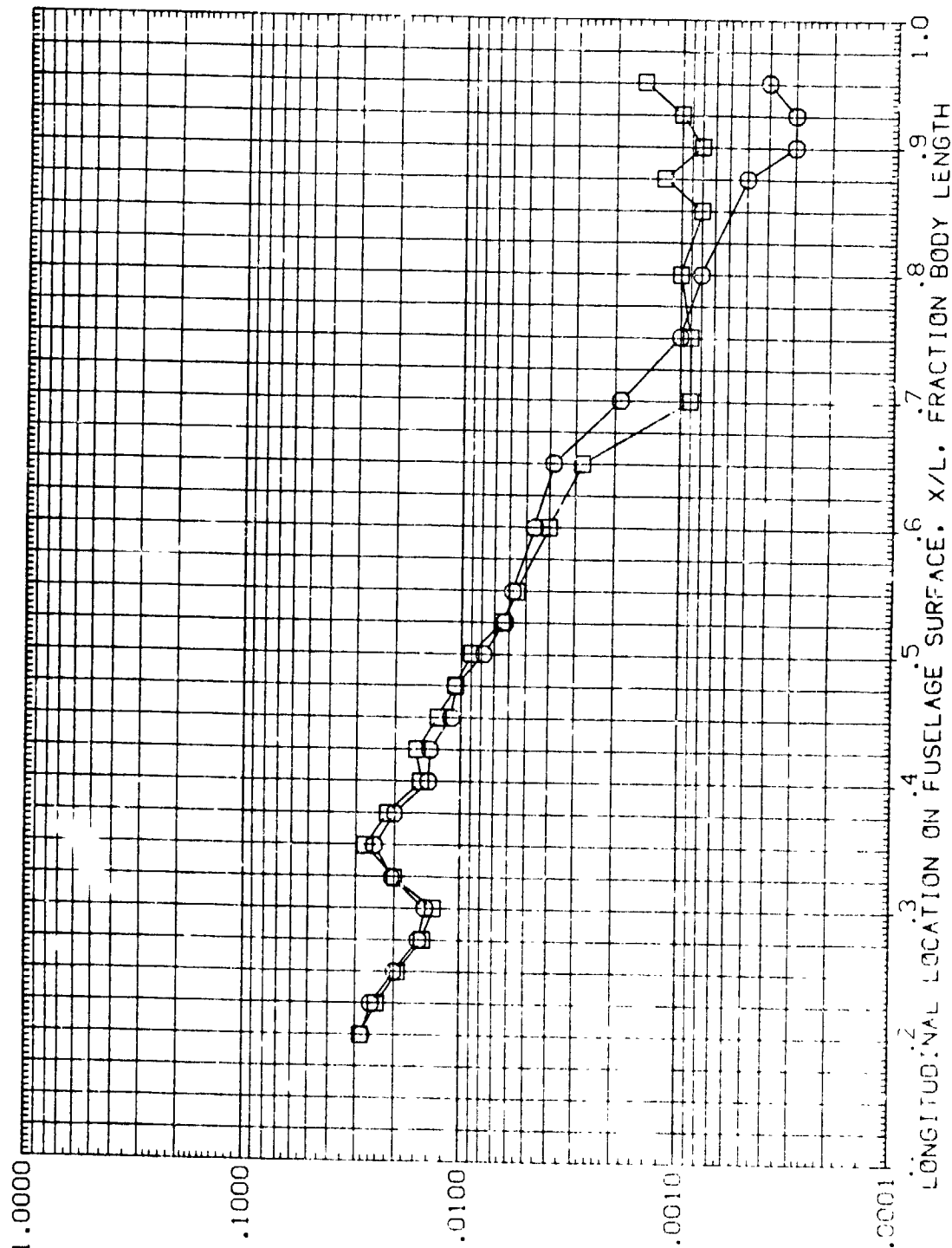


FIG. 18 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= -1

OH-74 (AEDC V41B-38A) B62C12F10M16W127E52V8R19 (RVB004)

SYMBOL \bigcirc RN/L .939 TRACE ALPHA 39.860

PARAMETRIC VALUES
BETA ELEVON .000
MACH RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

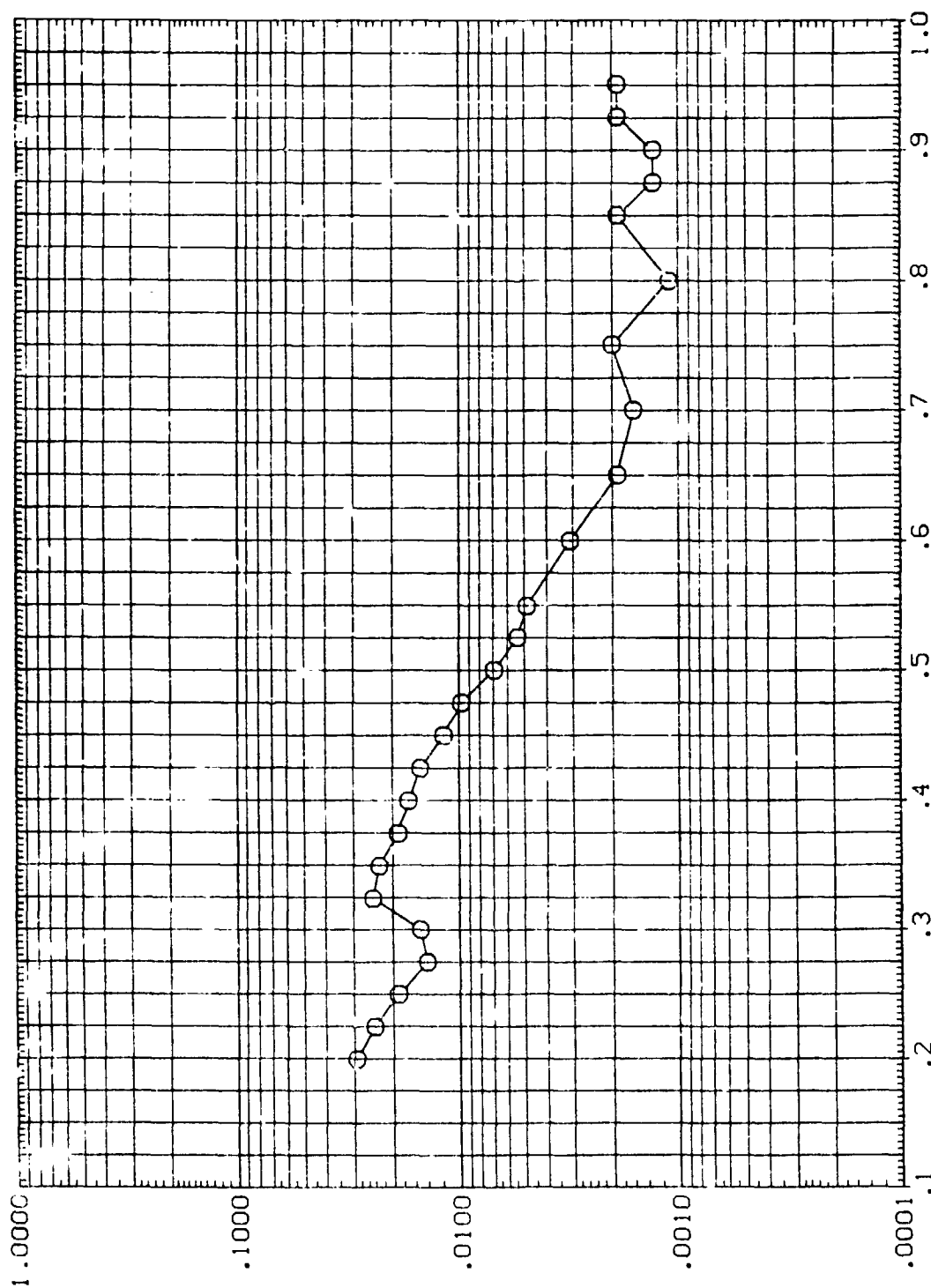


FIG. 18 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA = -1

SYMBOL: ☐ RN/L: .463 TRACE: 3.000 ALPHA: 43.840
☐ .939

PARAMETRIC VALUES
 BETA: -1.000 MACH: 8.000
 ELEVON: .000 RUDDER: .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

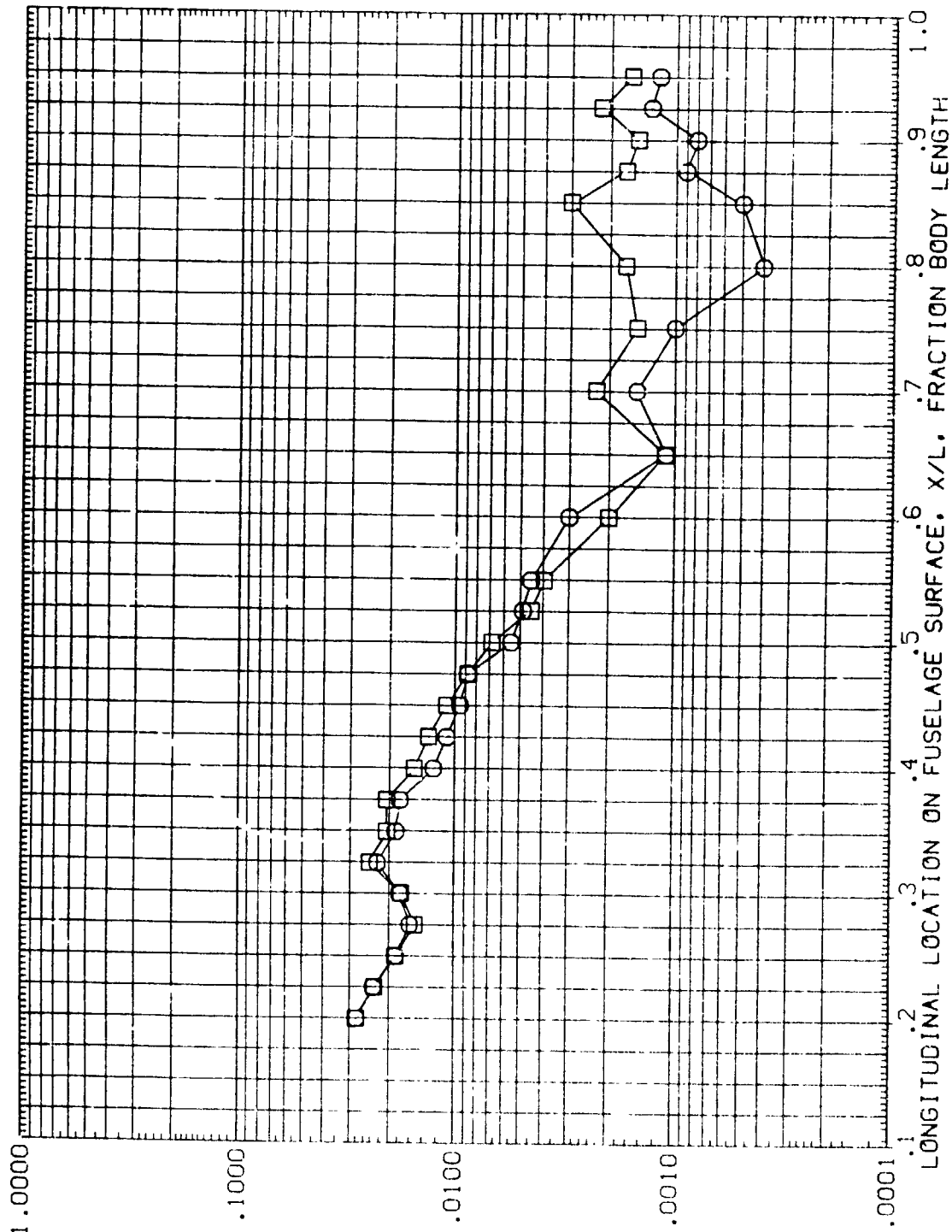


FIG. 18 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= -1

4 (AEDC 41B-B6A) B62C12F10M16W127E52V8R19 (RVB004)

5.000L RN/1 TRACE A/T/A 4.000 19.110

PARAMETRIC VALUES
BETA -1.000 MACP 8.000
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/REF

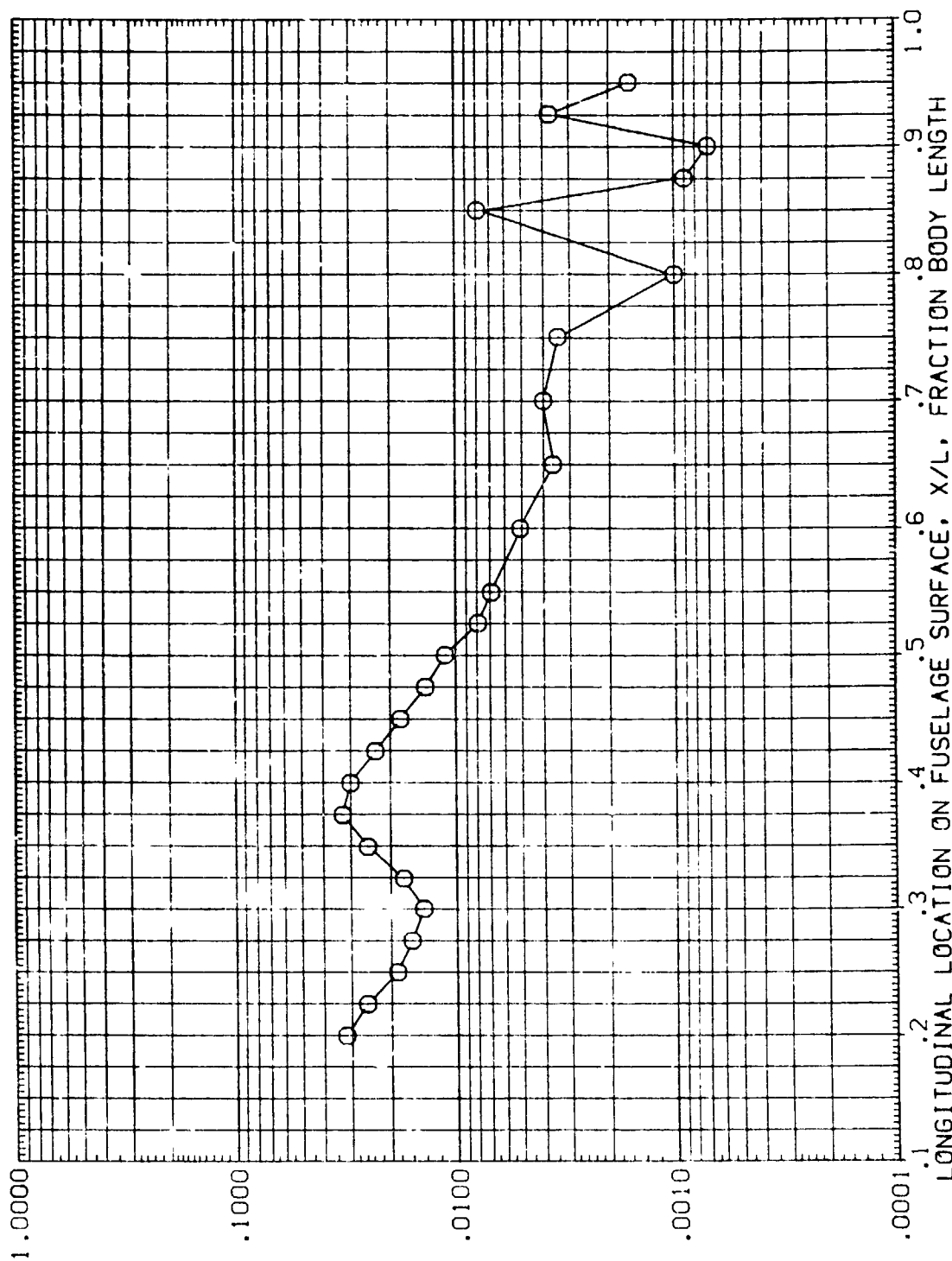


FIG. 19 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= -1

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB0004)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
○	.463	4.000	24.970	BETA	MACH	8.000
				ELEVON	RUDDER	.000

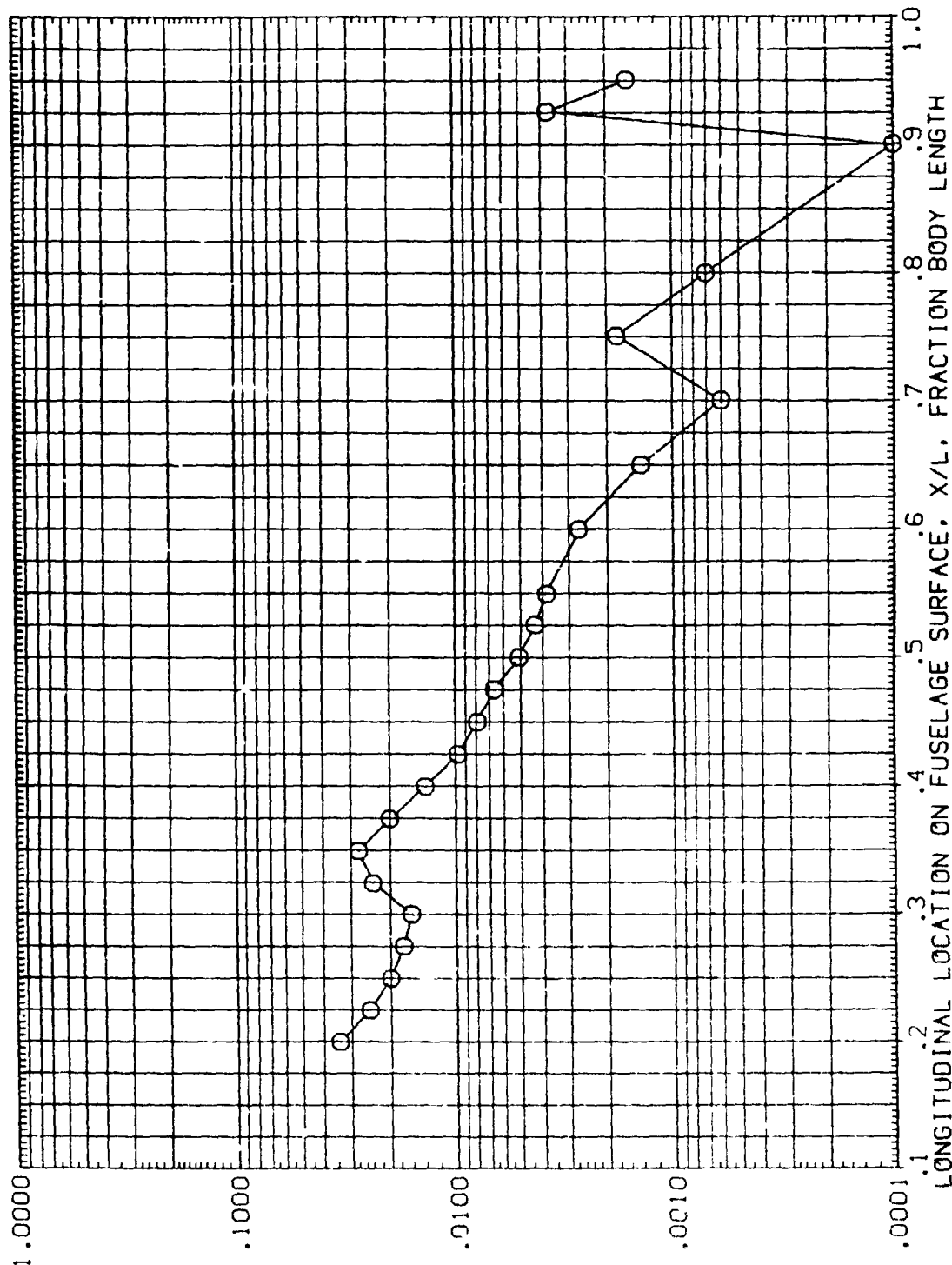


FIG. 19 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = -1

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

OH-74 (AENC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB0004)

RH/L .463	TRACE 4.000	ALPHA 29.830	PARAMETRIC VALUES		
			BETA ELEVON	MACH .000	RUDDER 8.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

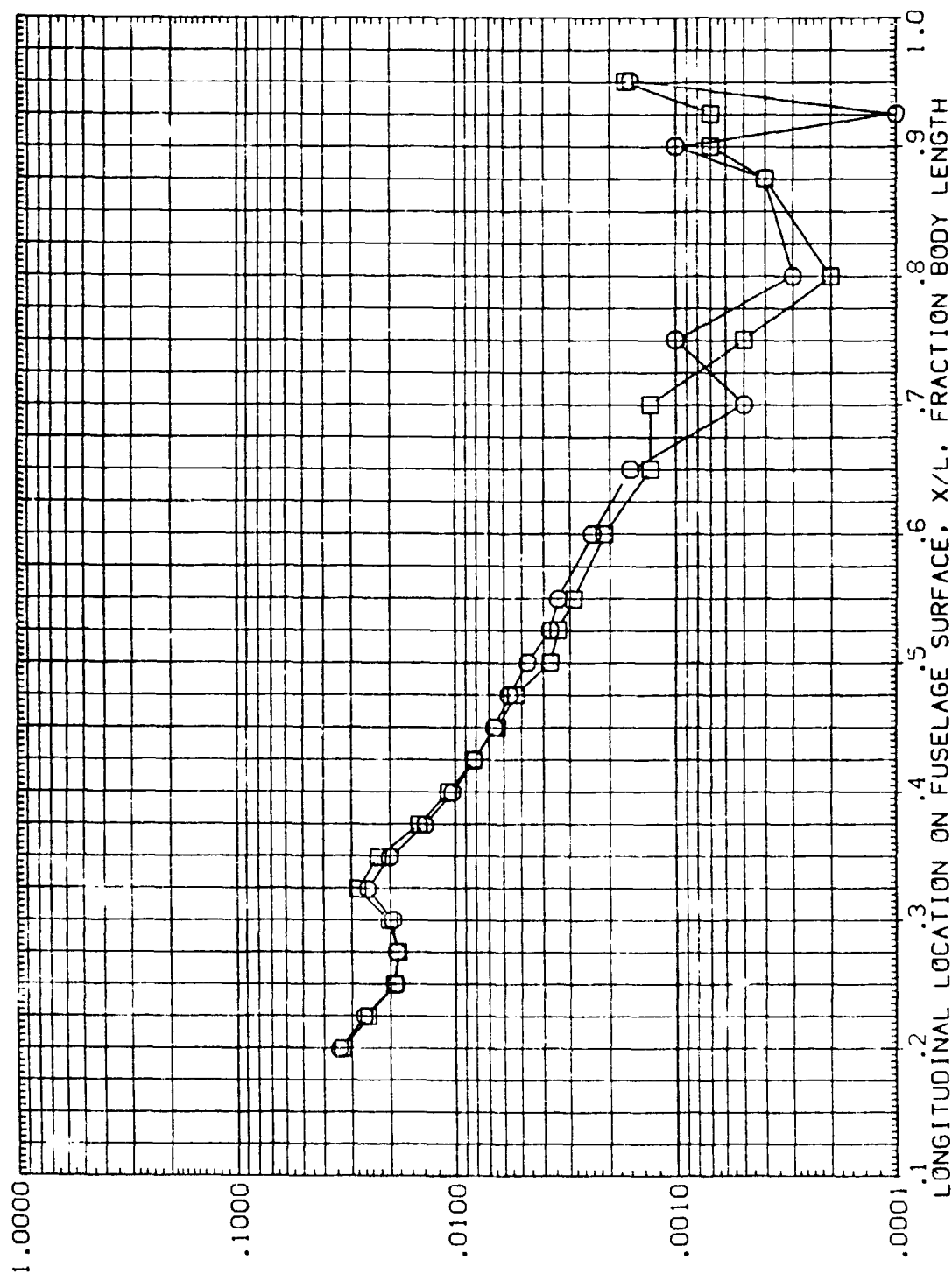


FIG. 19 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = -1

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
□	.463	4.000	34.740	BETA	MACH	8.000
○	.939			ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

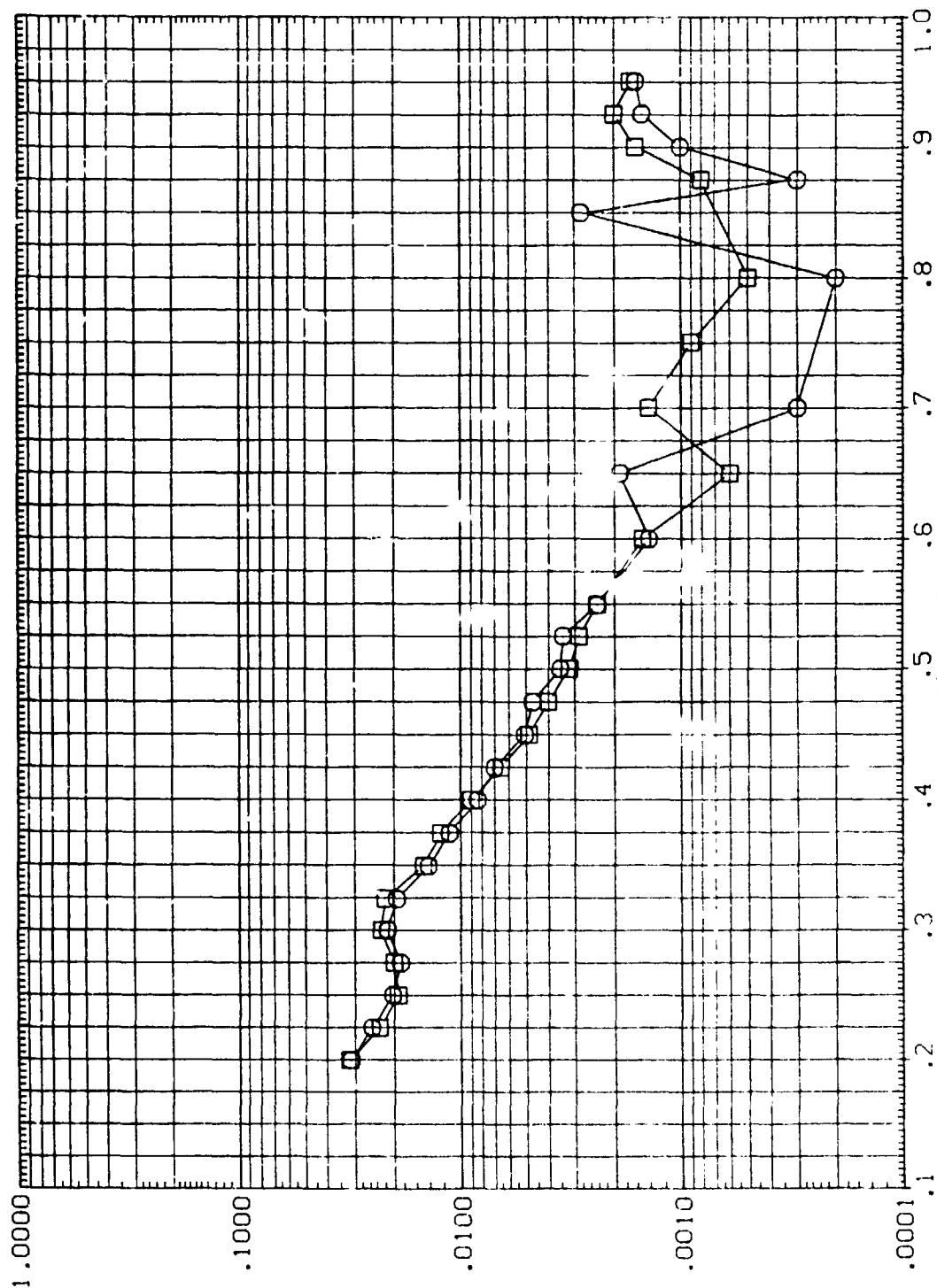
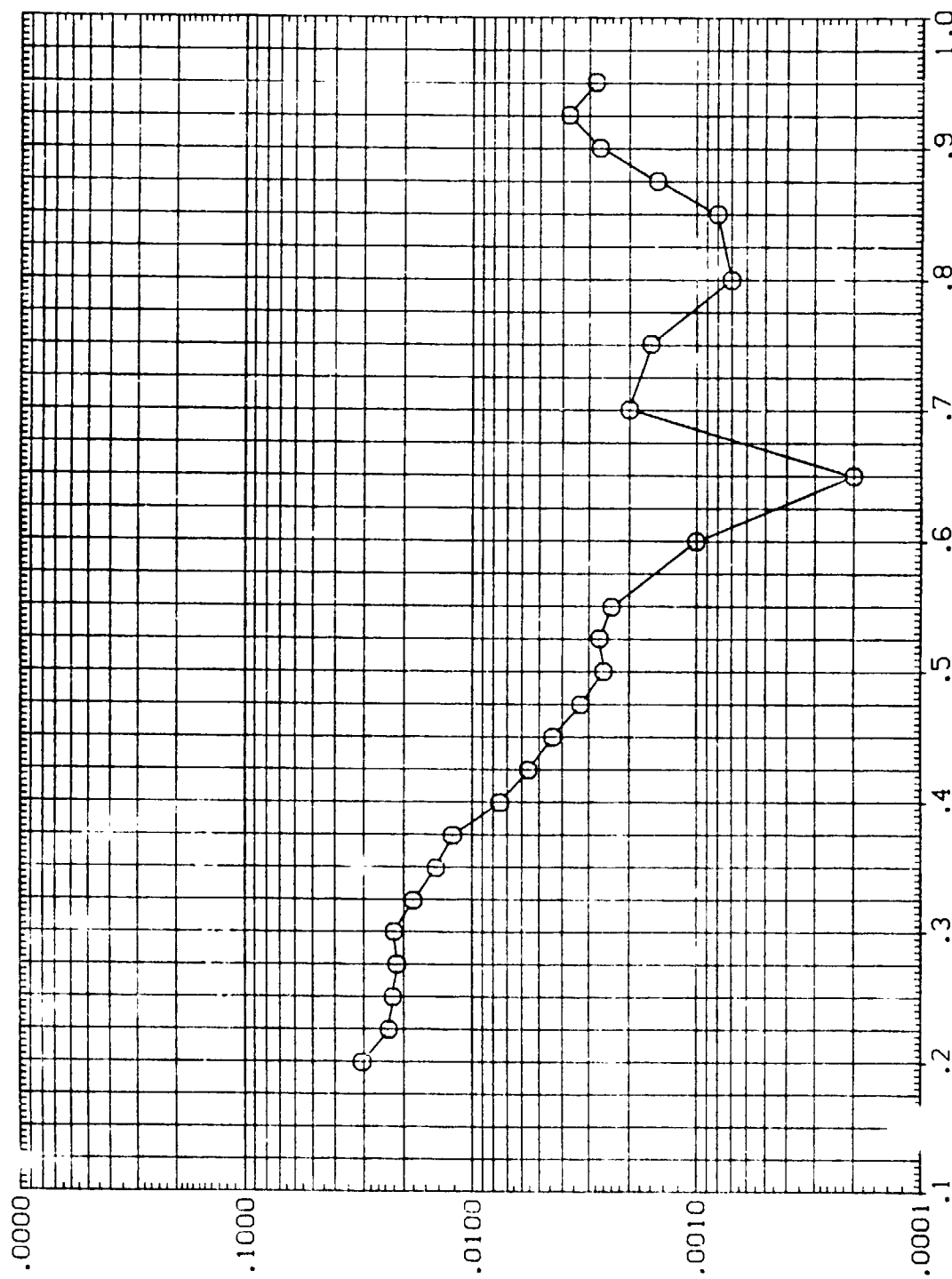


FIG. 19 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L. FRACTION BODY LENGTH
HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = -1

OH-74 (FEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB0004)

SYMBOL	PN/L	TRACE	ALP, A	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
○	.939	4.000	39.860	-1.000	.000	.000	8.000



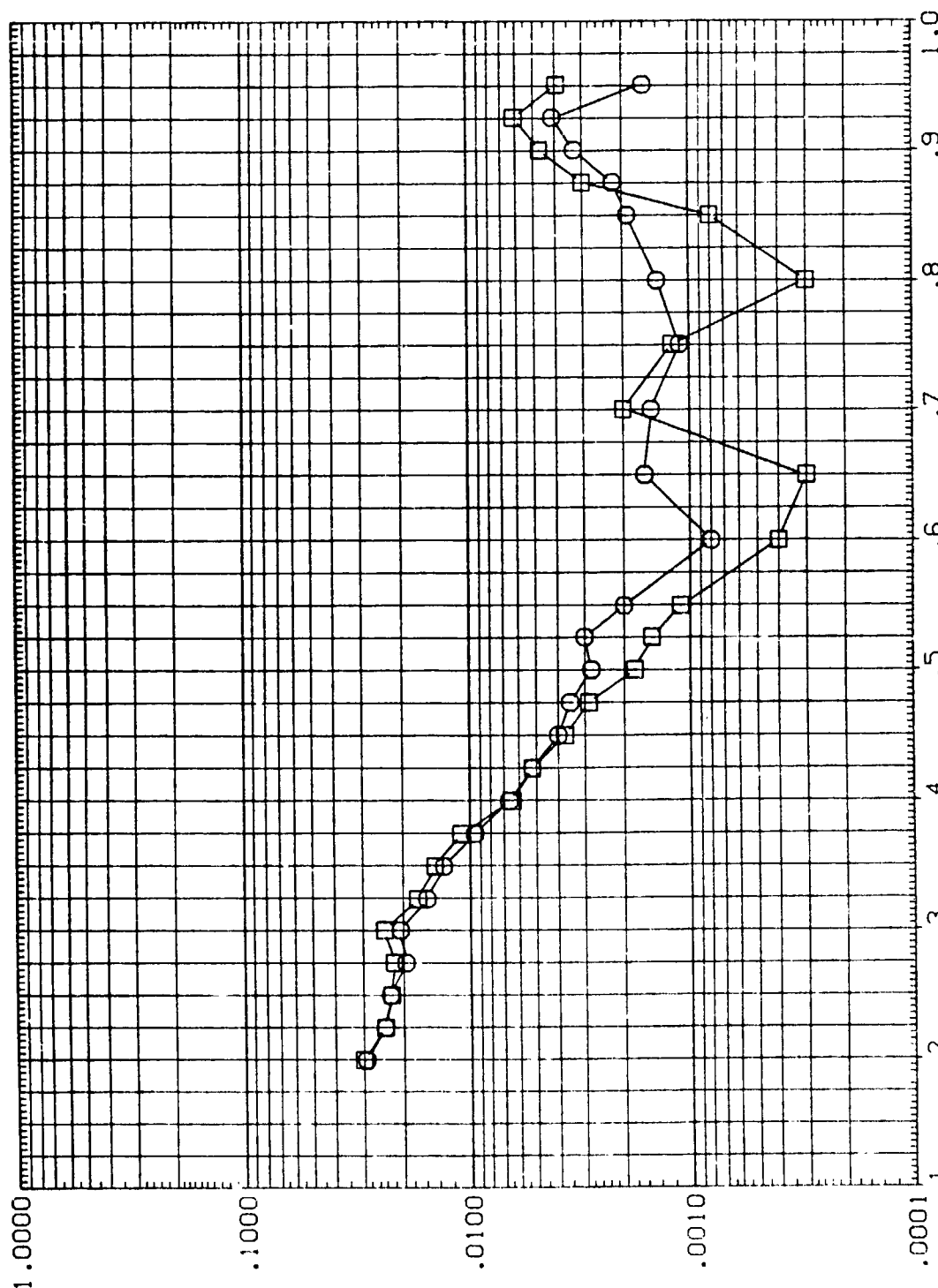
LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH

FIG. 19 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = -1

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB004)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
□	.463	4.000	43.840	-1.000	.000	.000
○	.939			.000	.000	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF



LONGITUDINAL LOCATION ON FUSELAGE SURFACE. X/L, FRACTION BODY LENGTH

FIG. 19 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= -1

OH-74 (AEDC V41B-38A) B62C12F10M16W127E52V8R19 (RVB0005)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
O	.456	1.000	19.990	-2.000	8.000	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

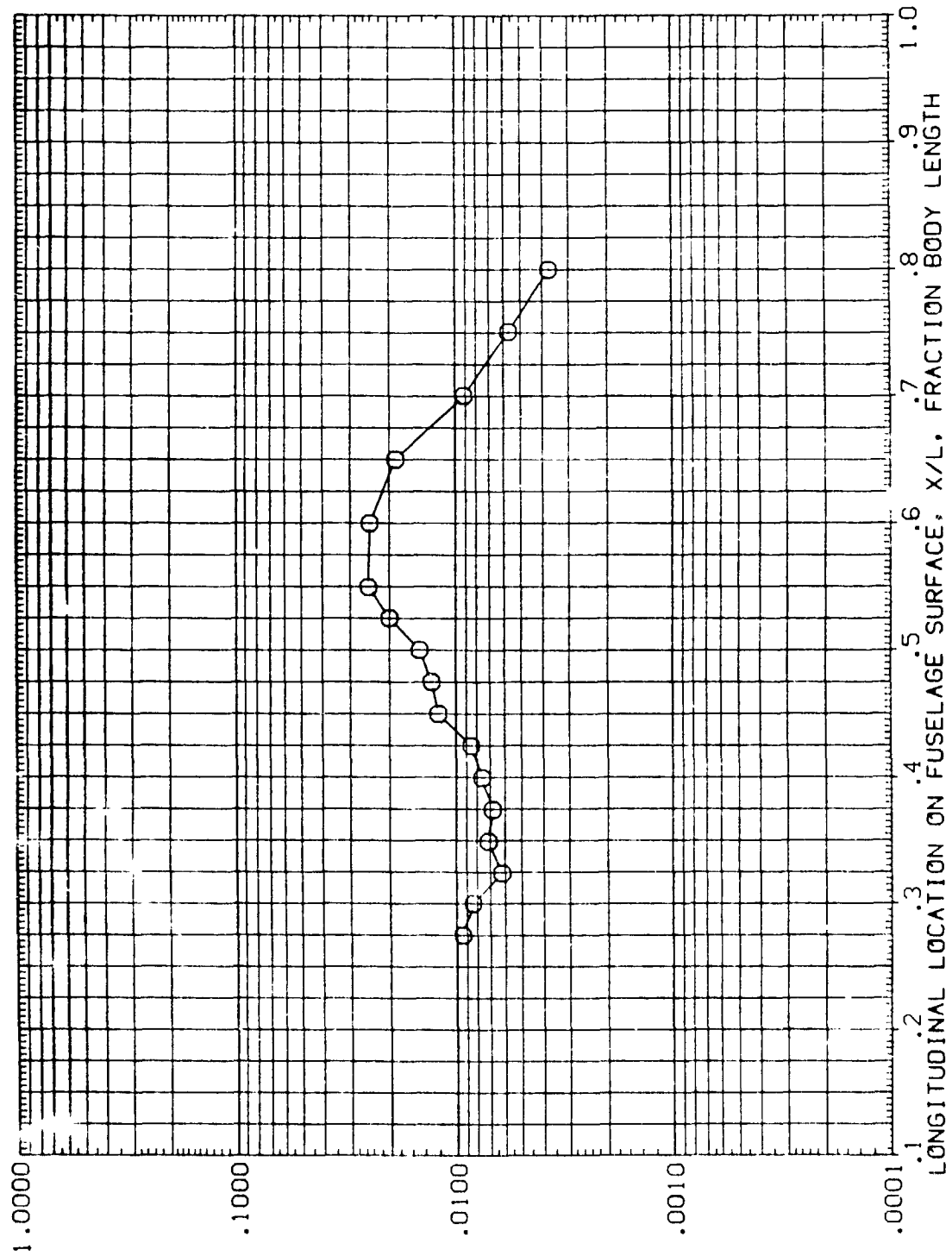


FIG. 20 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=-2

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB005)

SYMBOL	RM/L	TRACE	ALPHA	PARAMETRIC VALUES		
O	.456	1.000	24.960	BE A	MACH	8.000
				ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF

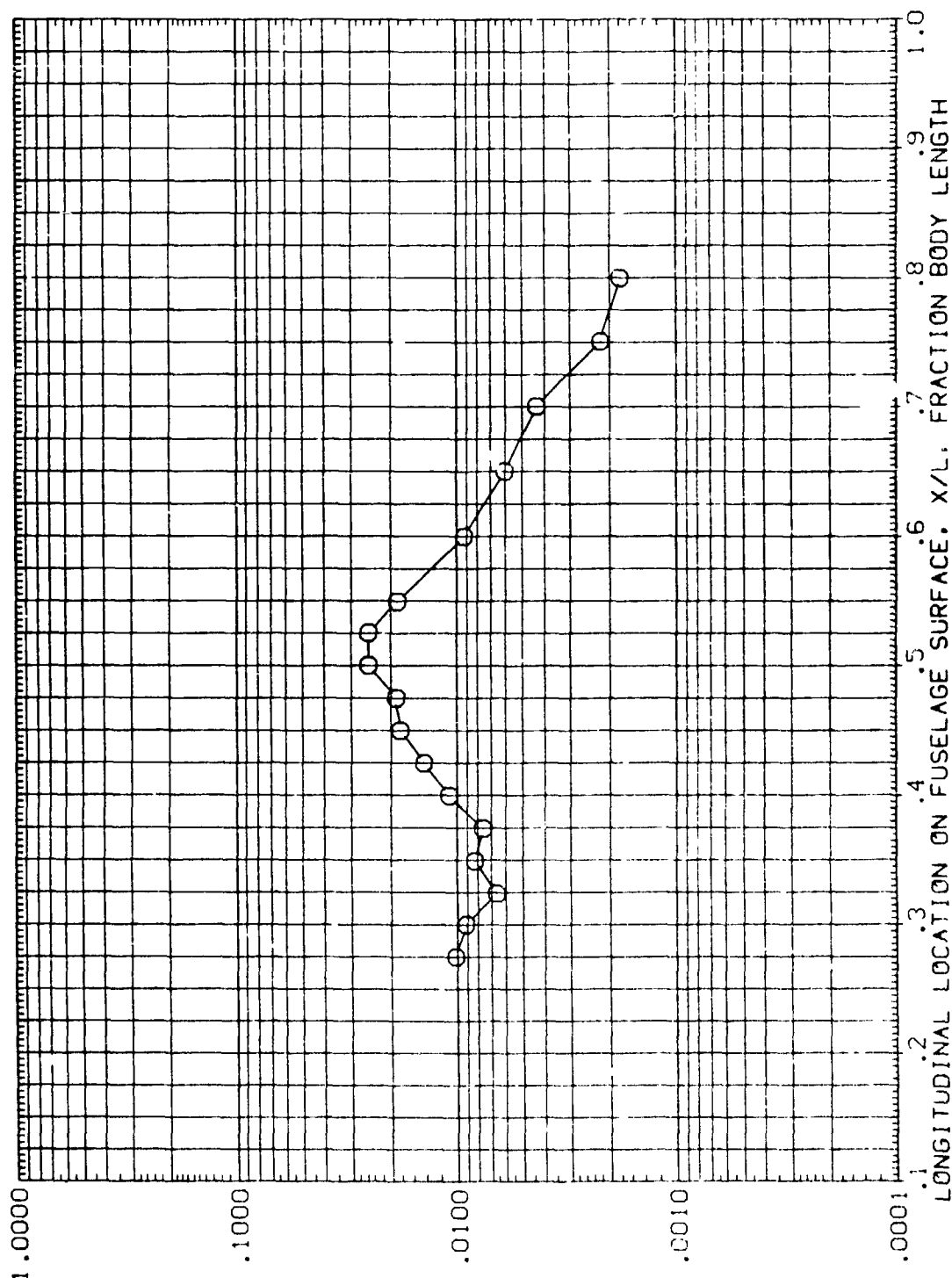


FIG. 20 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=-2

0H-4 (AEDC V415-B8A) B62C12F10M16W127E52V8R19 (RVB005)

SYMBOL	RM/L	TRACE	ALPHA	PARAMETRIC VALUES		
□	.45	1.000	29.830	BETA	MACH	8.000
	.93			ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF

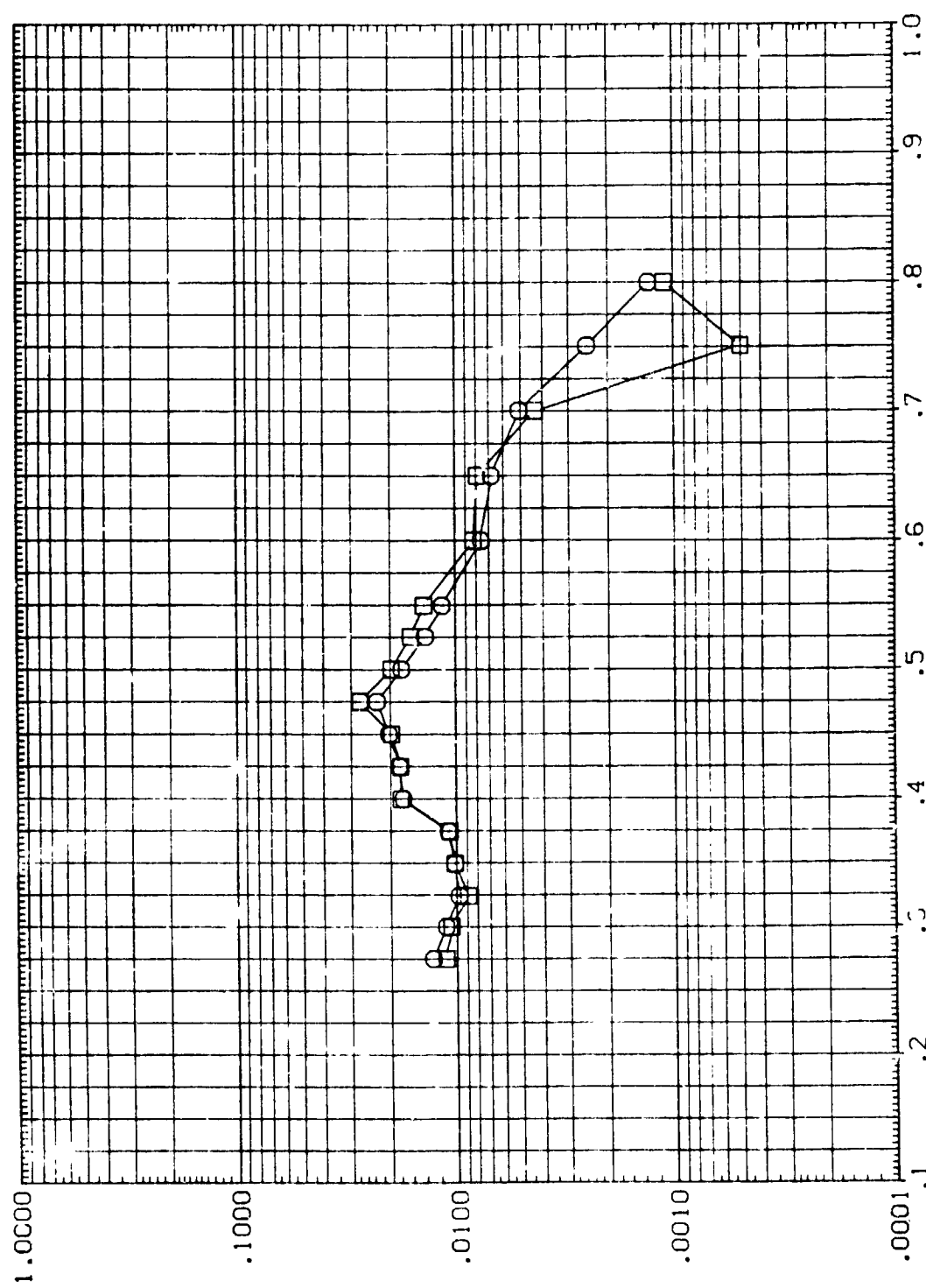


FIG. 20 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=-2

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB005)

SYMBOL	RW/L	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
○	.456	1.000	39.710	-2.000	9.000	
□	.943			.000		

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

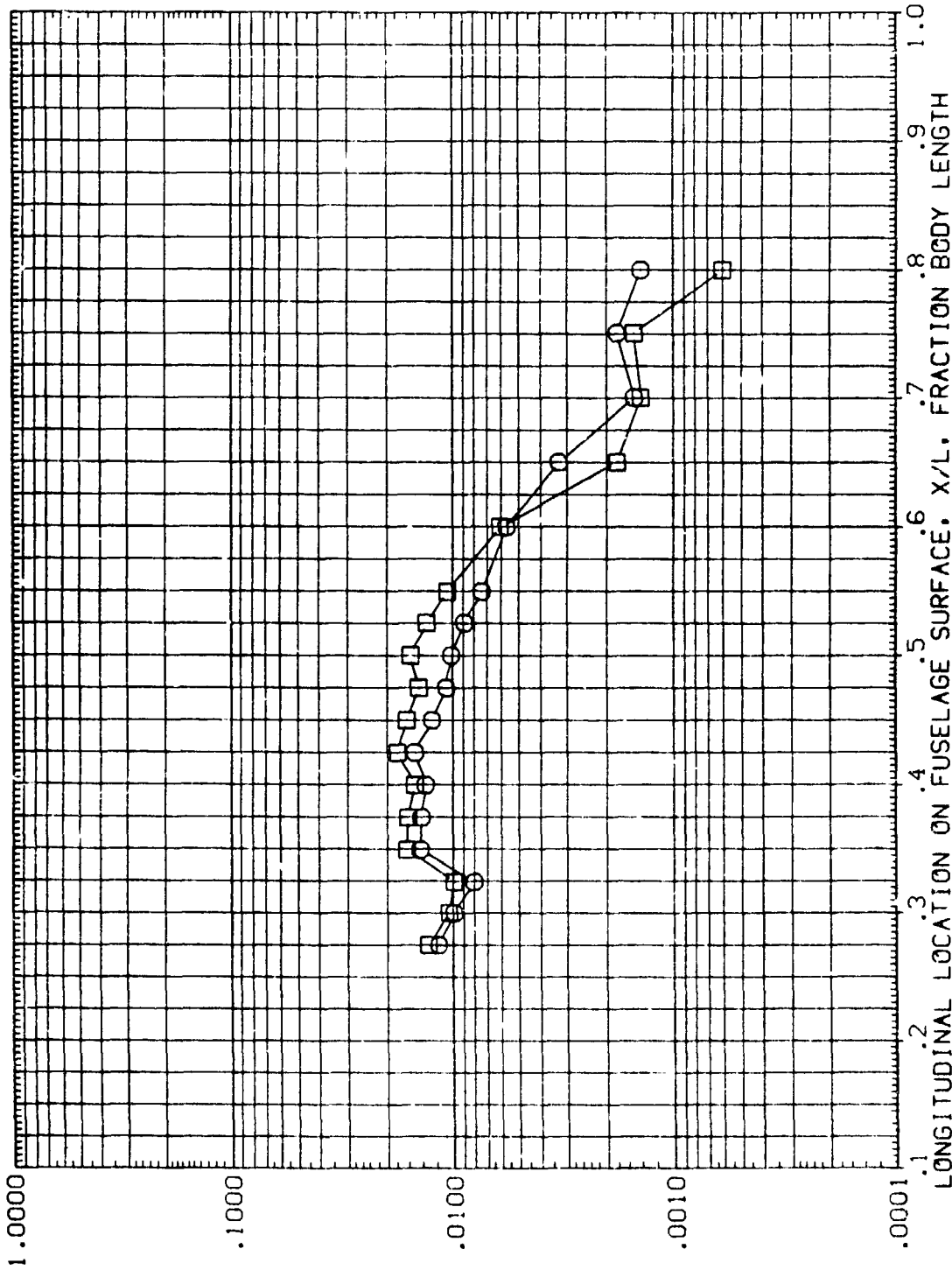


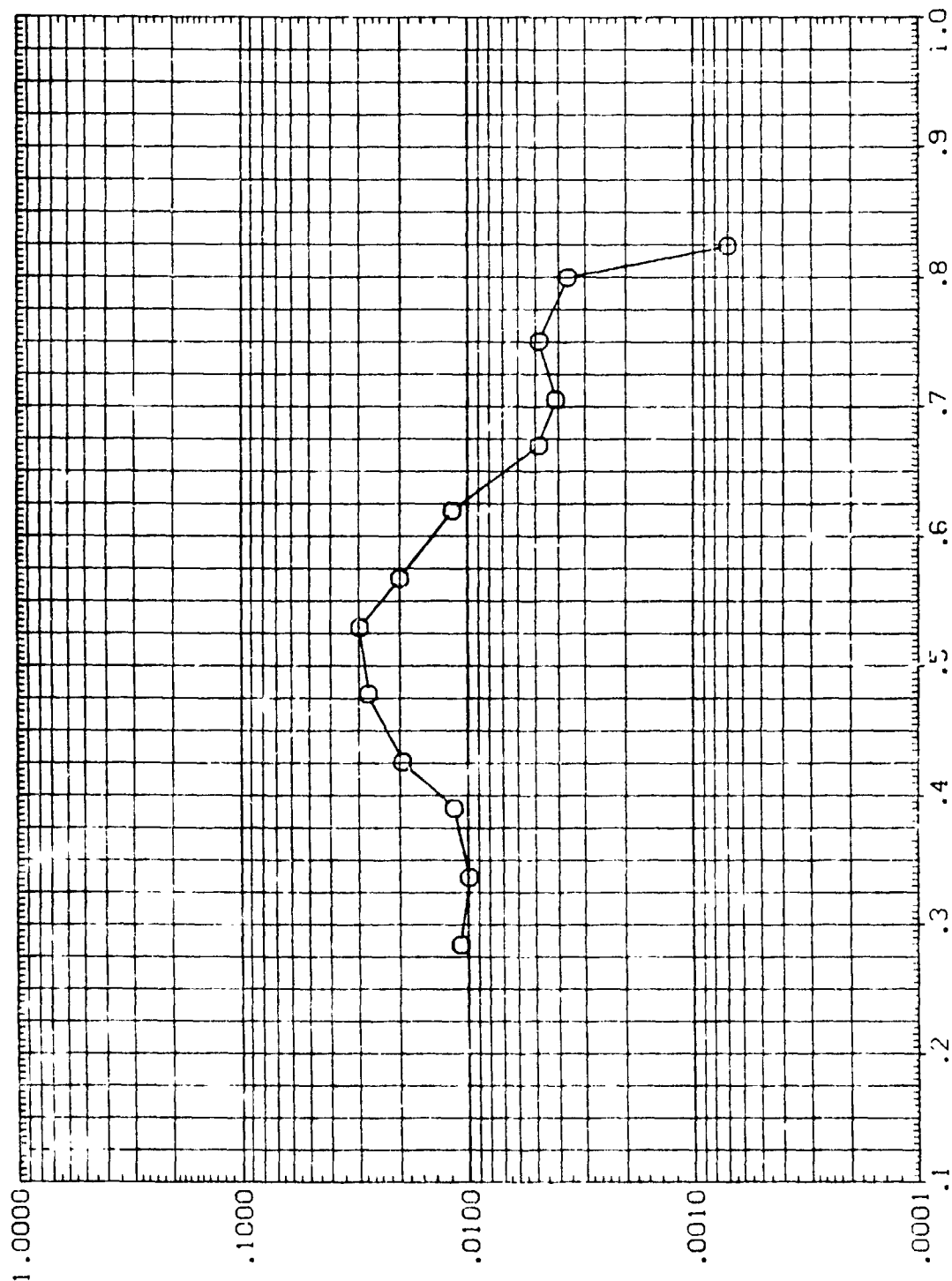
FIG. 20 HEAT TRANSFER COEFFICIENT RATIO ALONG UPPER TANGENT TRACE LINE, BETA=-2

OH-74 (REF V4 B-E8A) B62C12F10M16W127E52V8R19 (RVB005)

PARAMETRIC VALUES
 BETA -2.000 MACH 8.000
 ELEVON .000 RUDDER .000

SYMBOL 0
 .456
 2.000
 19.890

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF



LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH

FIG. 21 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA=-2

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB005)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
O	.456	2.000	24.960	BETA	MACH	8.000
				ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. SH/HREF

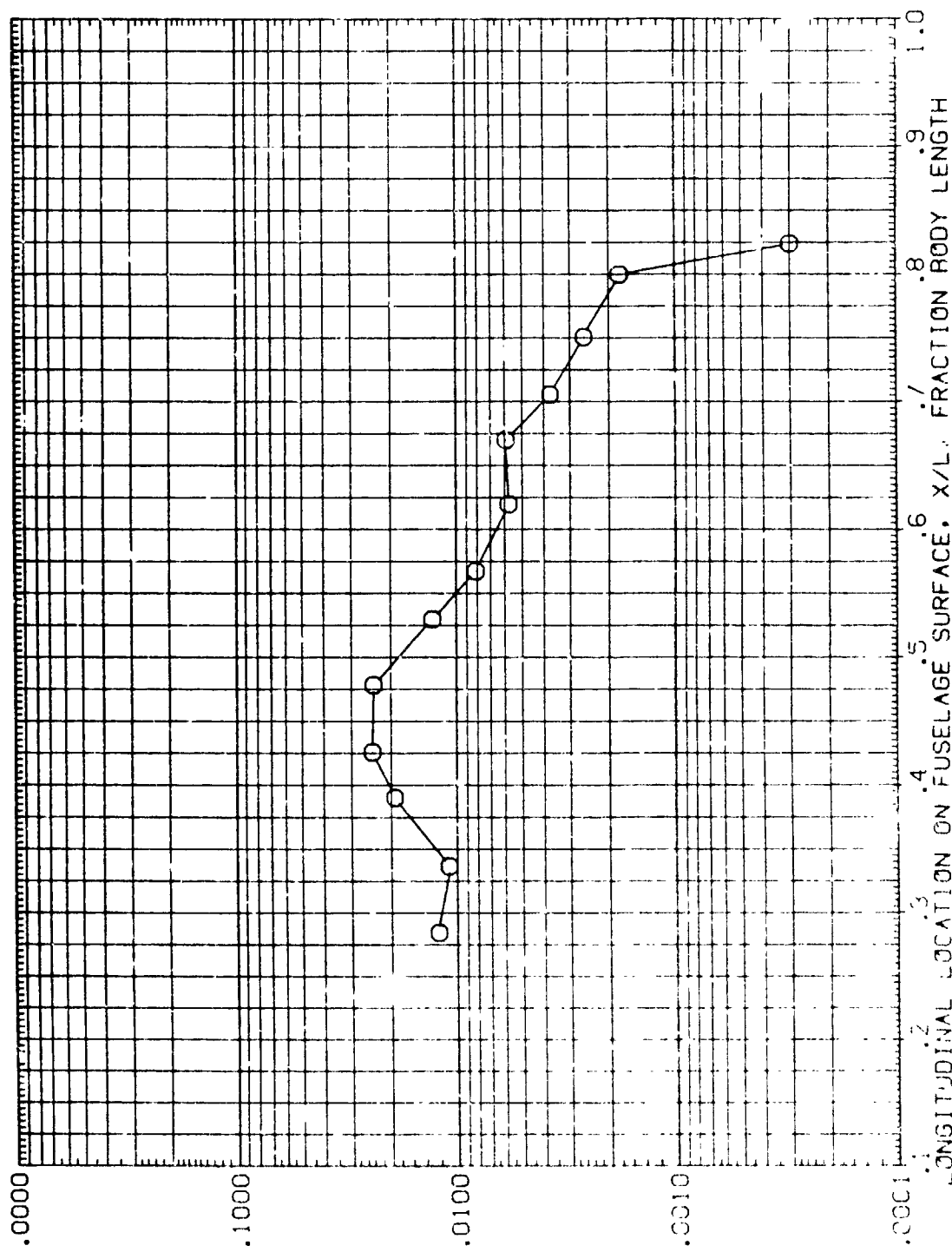


FIG. 21 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA = -2

OH-74 (A500 V41B-B8A) B62C12F10M16W12/E52V8R19 (RVB005)

SYMBOL □

RN/L .456
.1143

TRACE 2.000

ALPHA 29.830

PARAMETRIC VALUES
BETA ELEVON .000 RUDDER .000
MACH 8.000

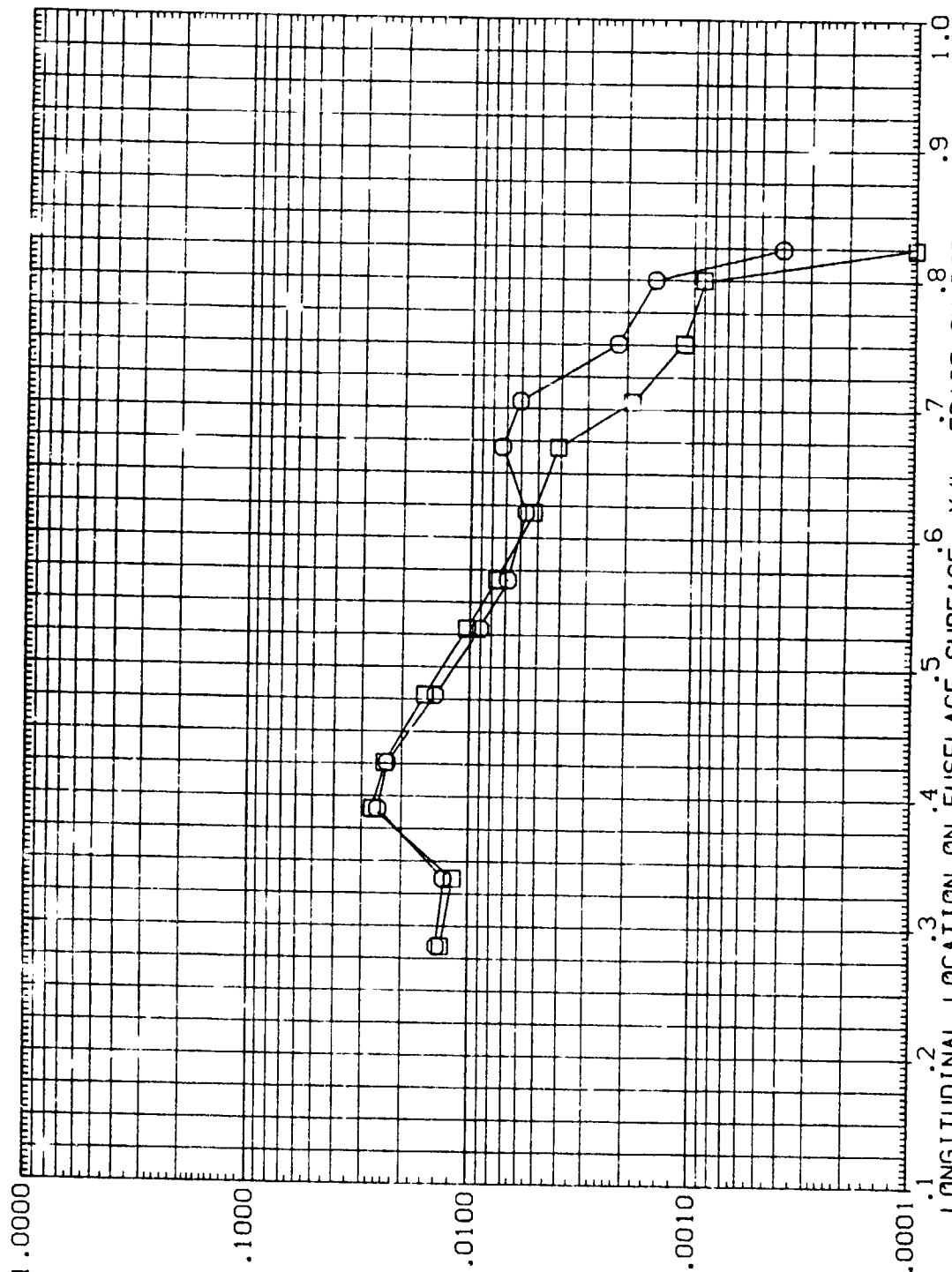


FIG. 21 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA = -2

QH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB0005)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
□	.456	2.000	9.710	-2.000	8.000	.000
○	.943					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

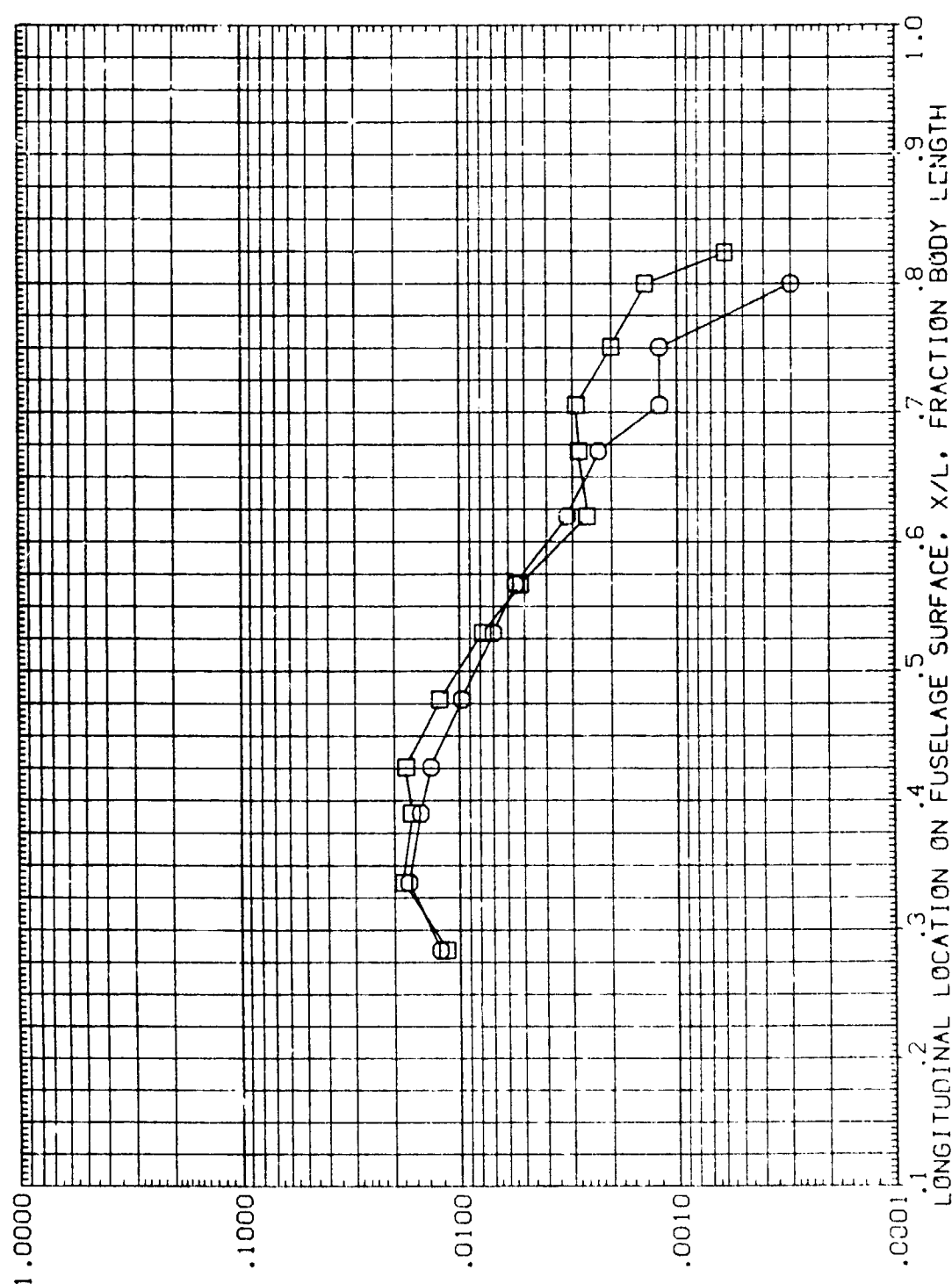


FIG. 21 HEAT TRANSFER COEFFICIENT RATIO ALONG HINGE LINE TRACE FOR BETA = -2

OH-74 (ALCC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB005)

SYMBOL RN/L TRACE ALPH/ 19.990

PARAMETRIC VALUES
BETA -2.000 MACH 8.000
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

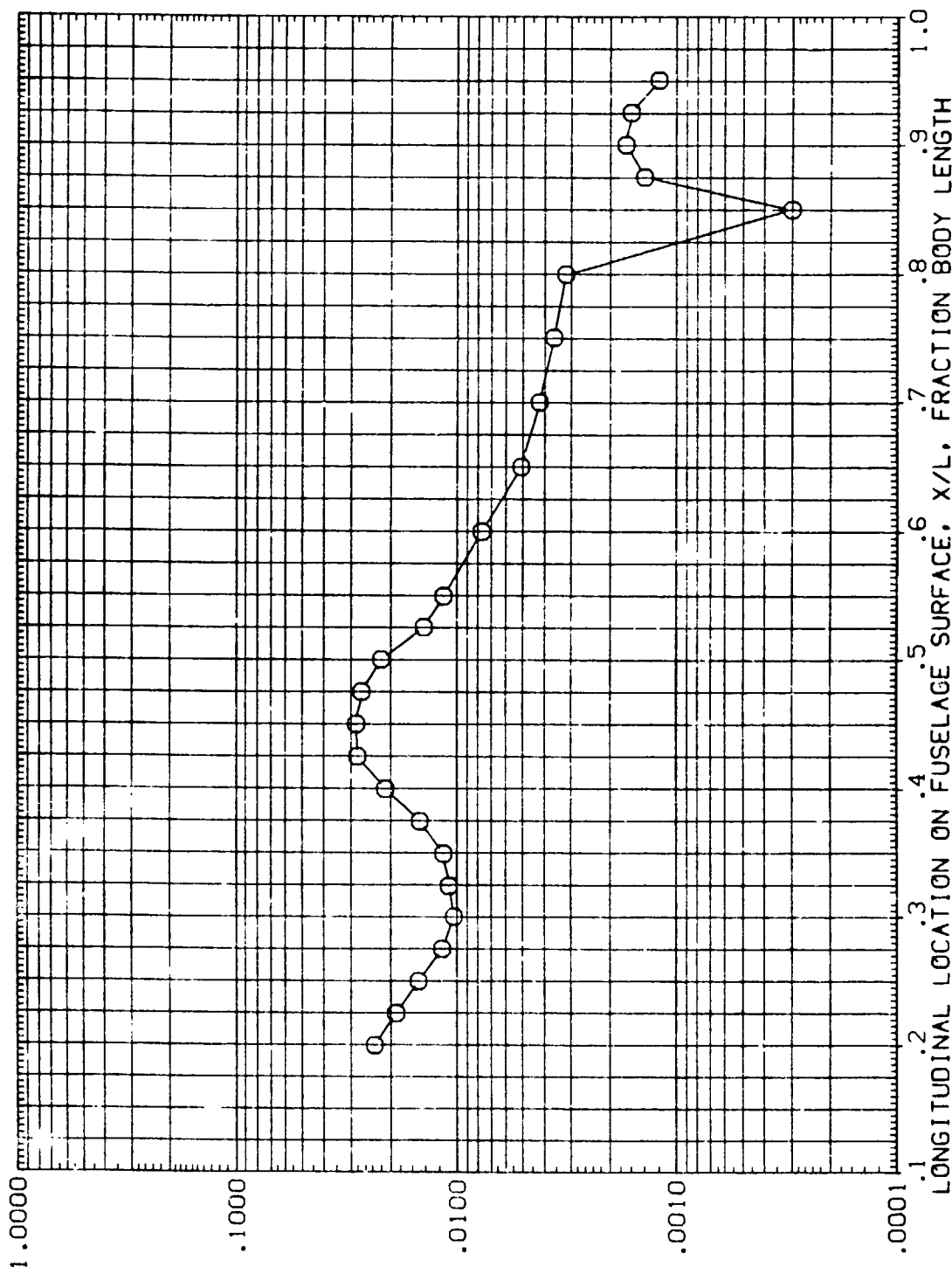


FIG. 22 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= -2

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB005)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
O	.456	3.000	24.960	BETA	MACH	8.000
				ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

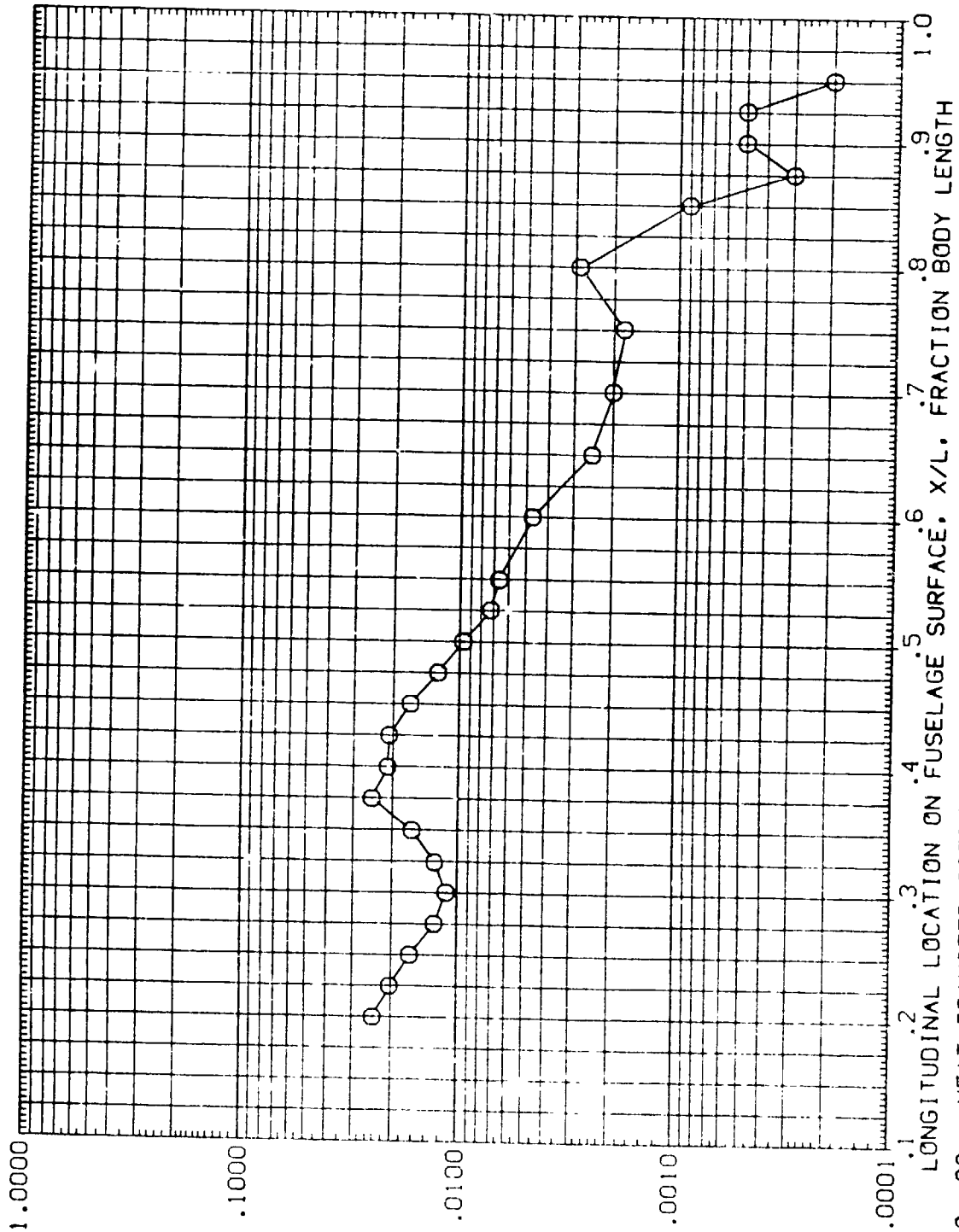


FIG. 22 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA = -2

OH-74 (AEDC 418-B8A) B62C12F10M16W127E52V8R19 (RVB005)

SYMBOL RN/I TRACE ALTITUDE
 □ .4.6 3.000 29.830
 ○ .9.1

PARAMETRIC VALUES
 BETA -2.000 MACH 8.000
 ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

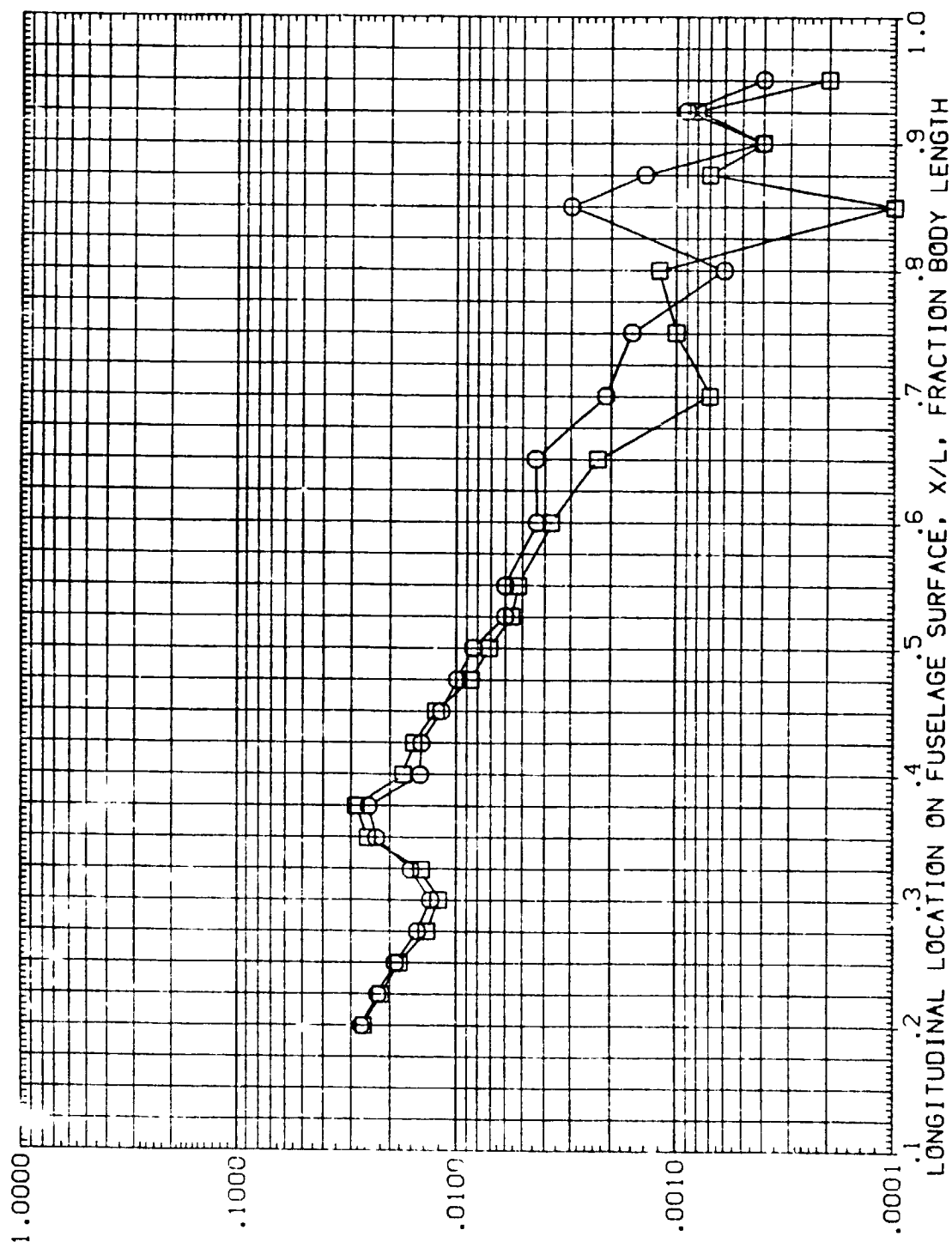


FIG. 22 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA=-2

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
□	.456	3.000	39.710	BETA	MACH	8.000
○	.943			ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

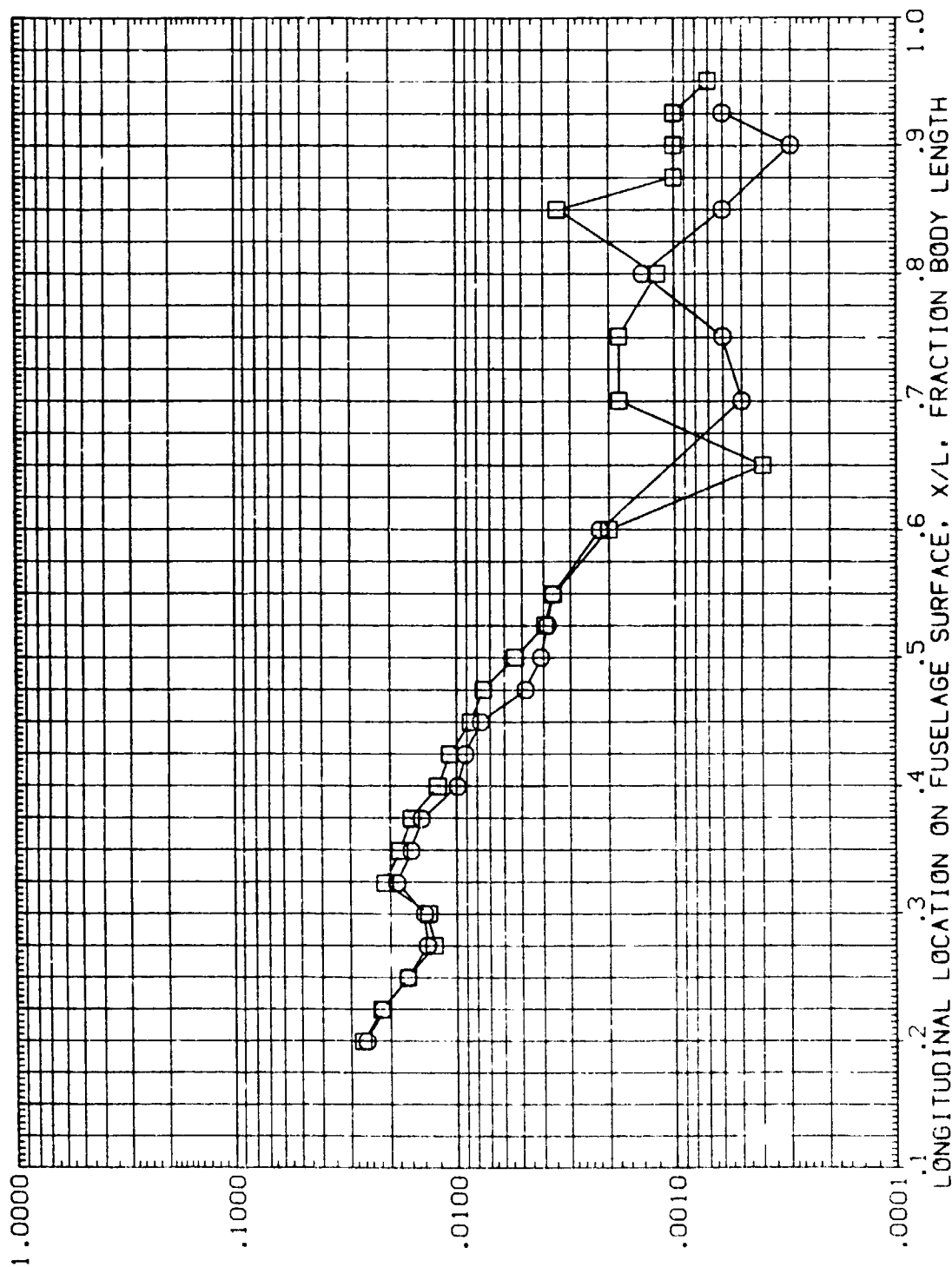


FIG. 22 HEAT TRANSFER COEFFICIENT RATIO ALONG W. L. 400 TRACE FOR BETA= -2

CH-7 (AEDC V4.2-88A) B62C12F10M16W127E52V8R19 (RVB005)

SYMBOL	TRACE	ALPHA	PARAMETRIC VALUES	
			BETA	MACH
O	4.000	19.990	-2.000	6.000
			ELEVON	RUDDER

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

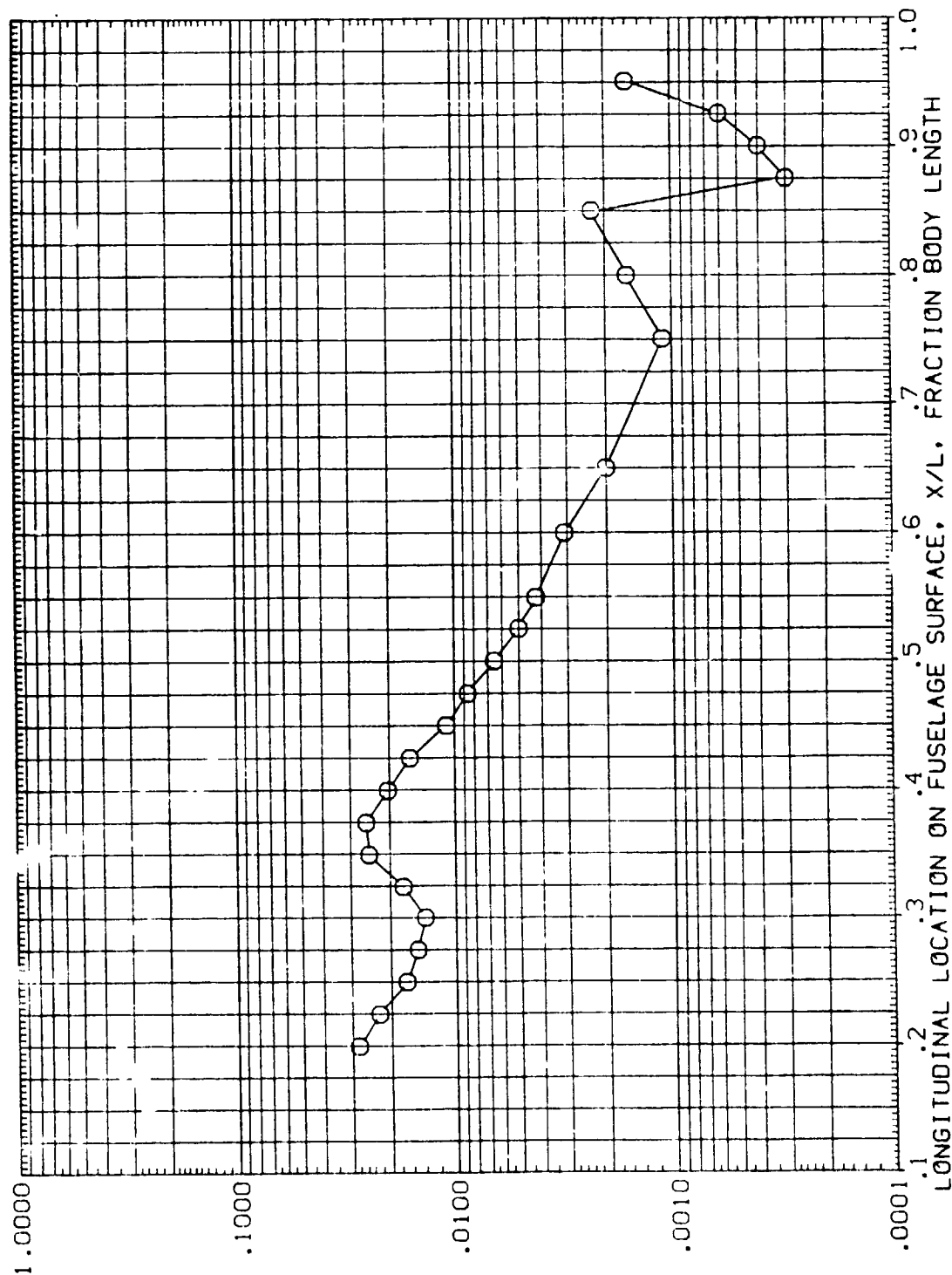


FIG. 23 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = -2

OH-74 (AECC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB005)

SYMBOL	RN/L	TRACE	ALPHA	PARAMETRIC VALUES		
O	.456	4.000	24.960	BETA	MACH	8.000
				ELEVON	RUDDER	.000

MEASURED TO 14EQ. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

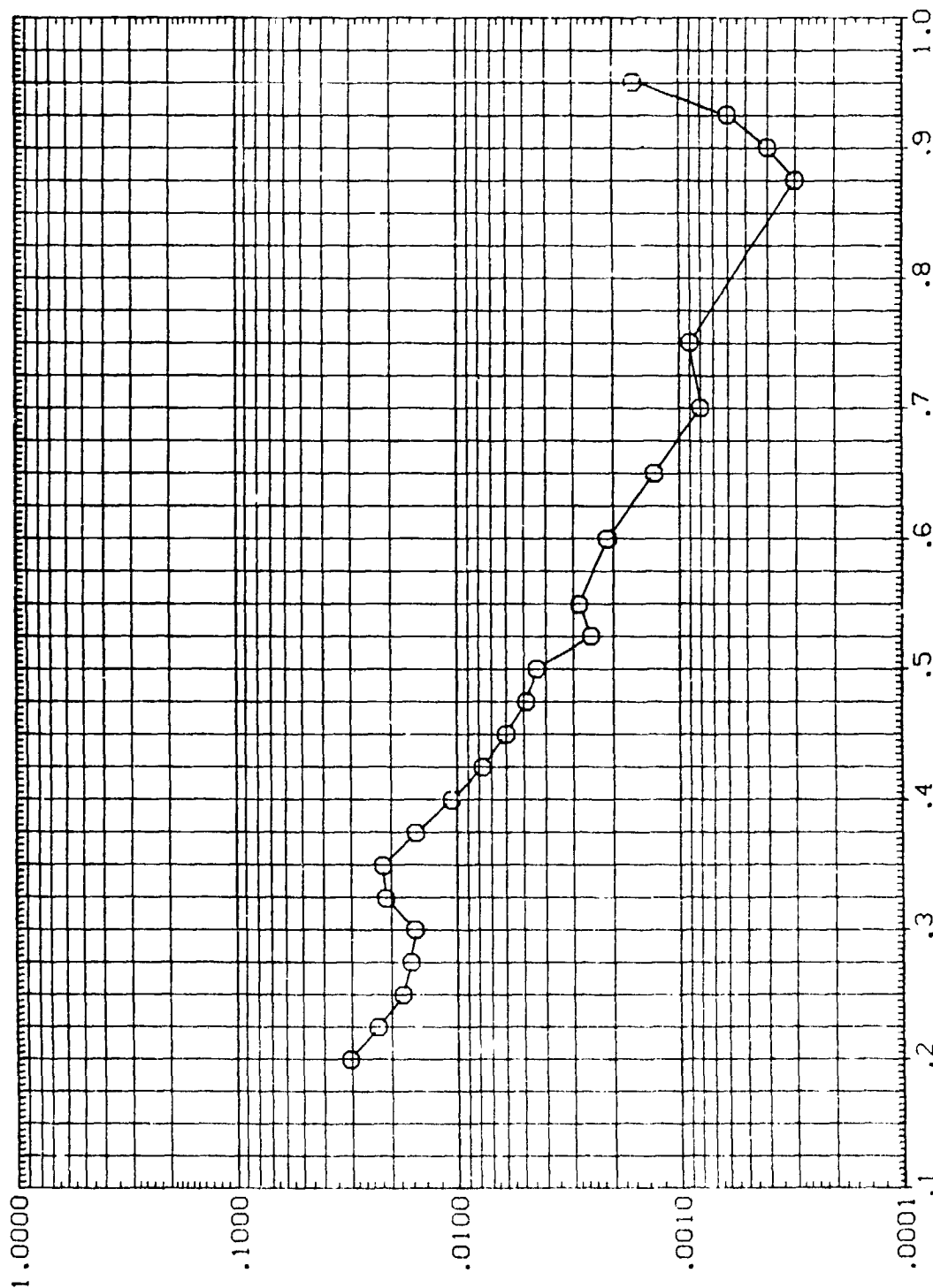


FIG. 23 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L, FRACTION BODY LENGTH
HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = -2

001-74 (AEL V41B-B8A) B62C12F10M16W127E52V8R19 (RVB005)

PARAMETRIC VALUES
 BETA -2.000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE ALPHA
 1.000 29.830

SYMBOL RN/L
 □ .973

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

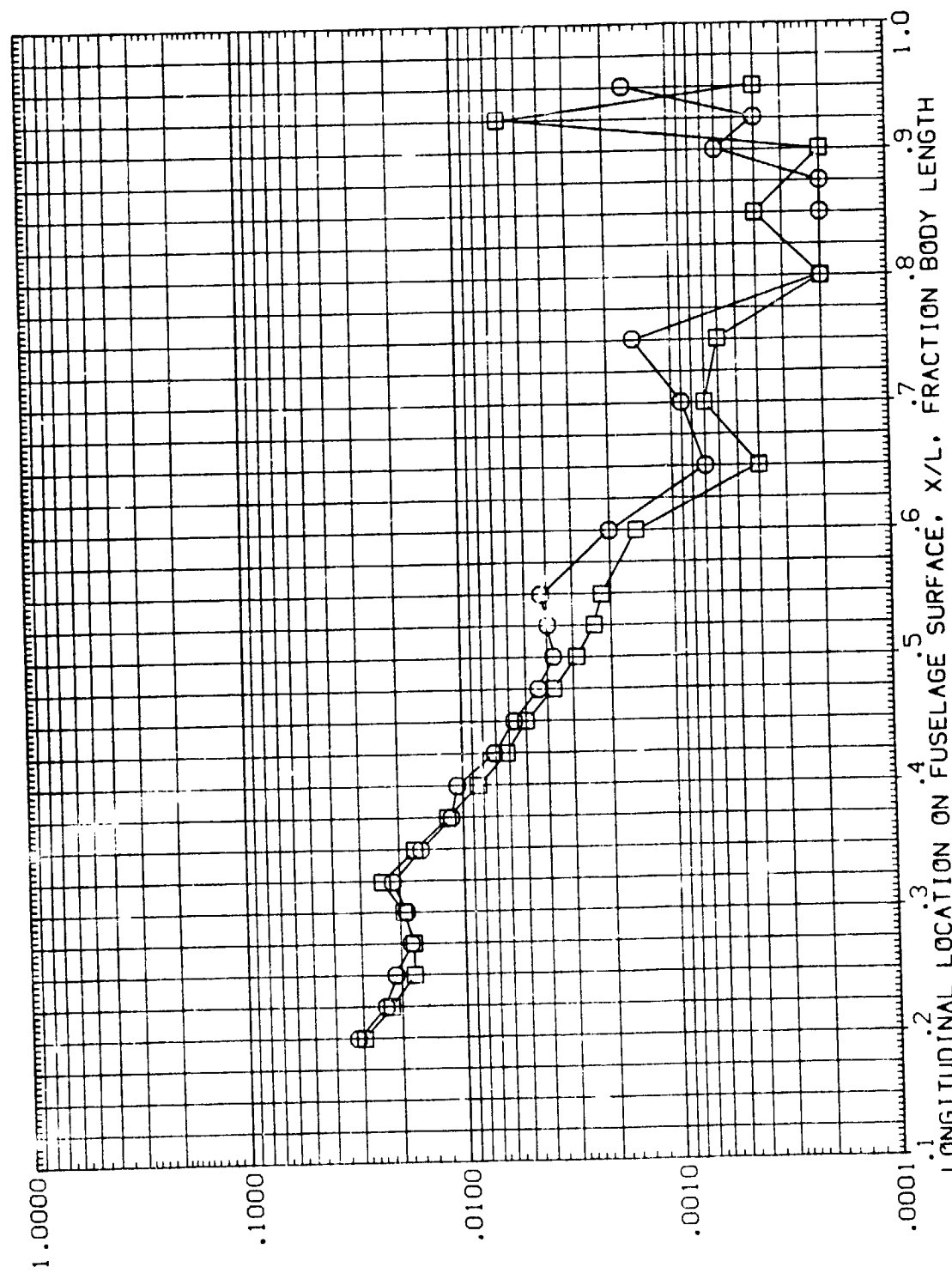


FIG. 23 LONGITUDINAL LOCATION ON FUSELAGE SURFACE, X/L. FRACTION BODY LENGTH
 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA = -2

QH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (RVB0005)

SYMBOL	RV/L	TRACE	ALPHA	BETA	PARAMETRIC VALUES
□	.456	4.000	39.710	ELEVON	-2.000 MACH .000
○	.943			RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

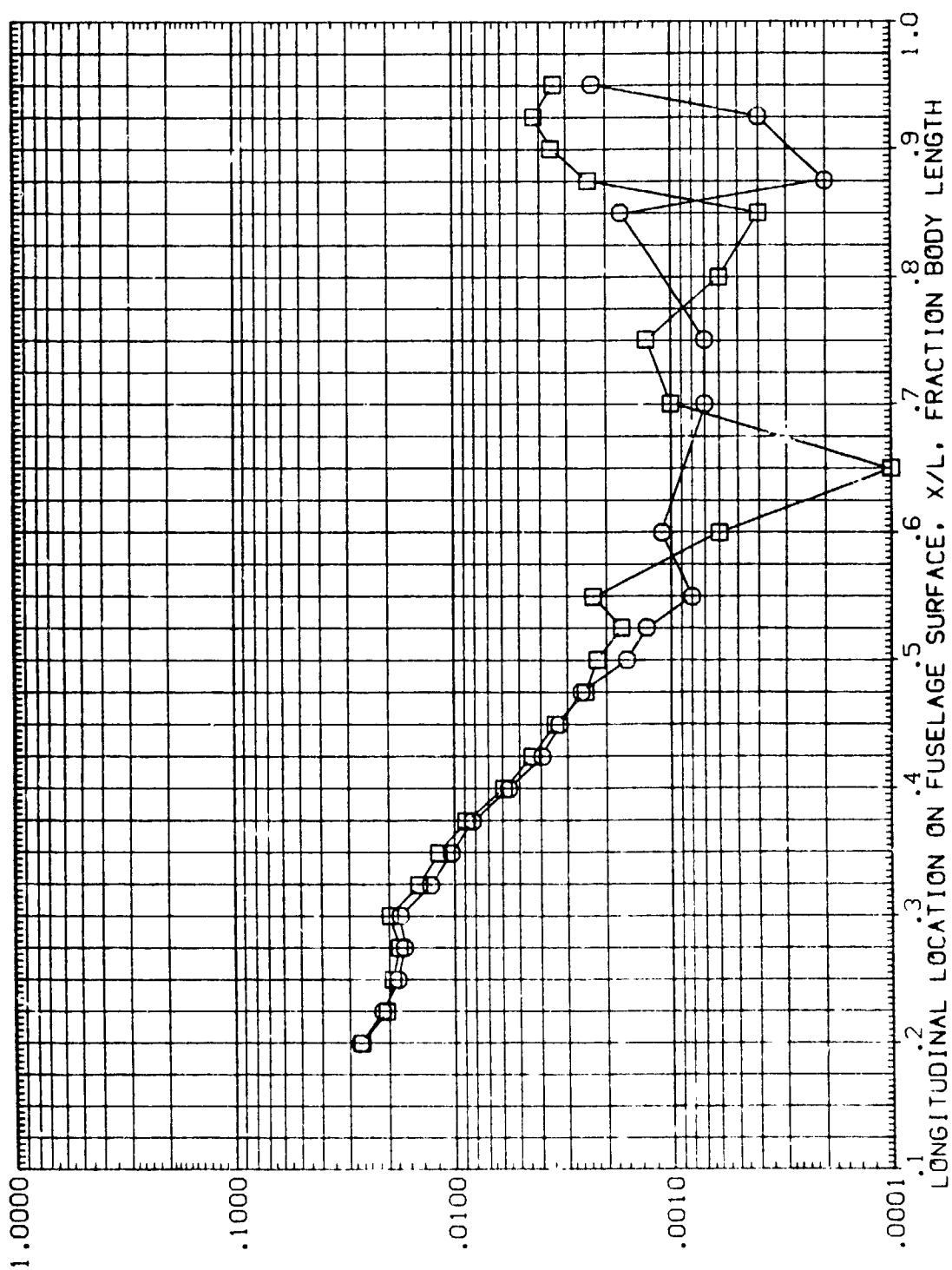


FIG. 23 HEAT TRANSFER COEFFICIENT RATIO ALONG TRACE LINE A/B FOR BETA= -2

C-174 (AEDC V41B-88A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
□	1.0	1.000	19.710	.000	8.000	.000
◇	2.0			.000		
△	3.0					
▽	4.000					
▽	5.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

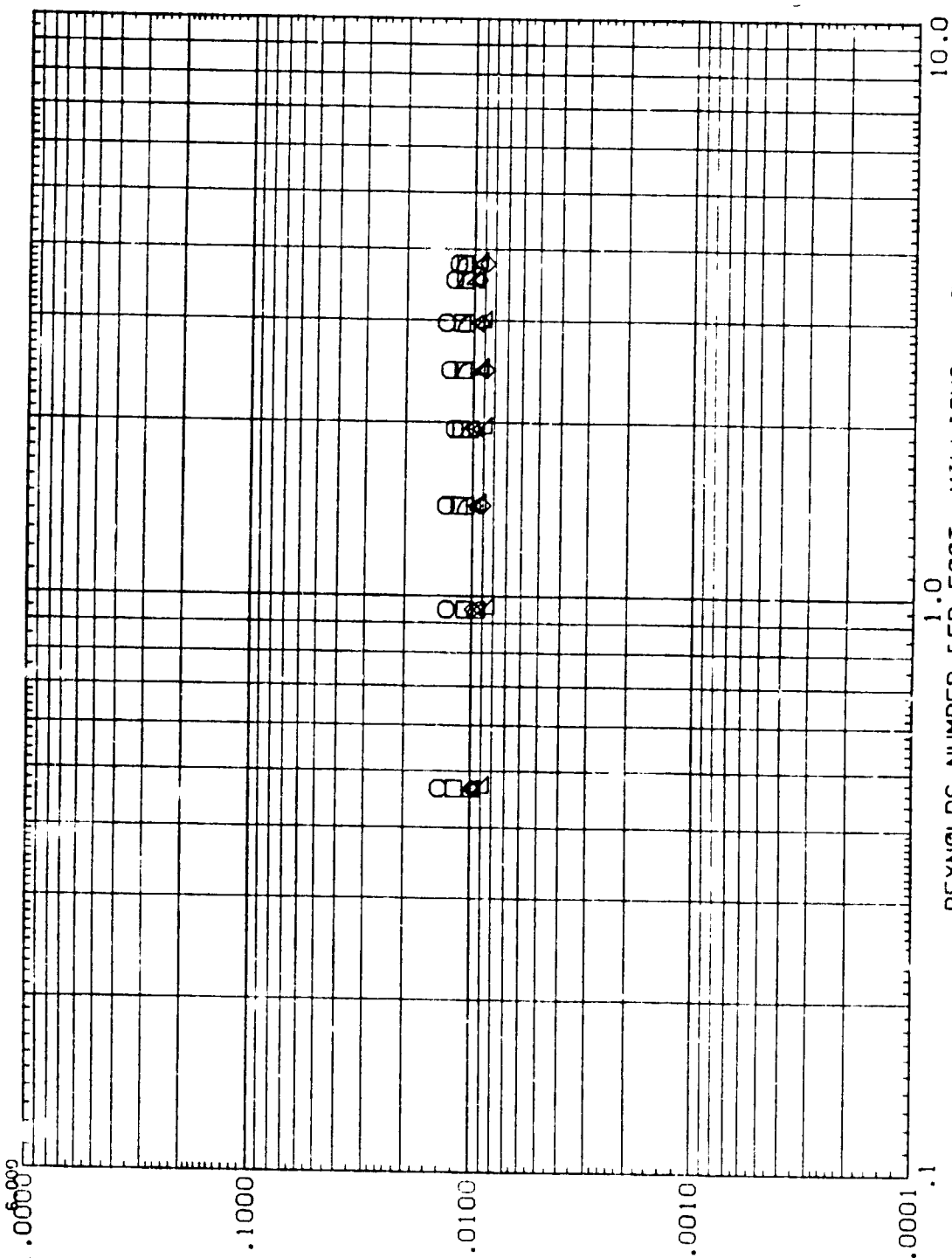


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL T/C NO TRACE ALPHA

PARAMETRIC VALUES
BETA .000 MACH 8.000
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

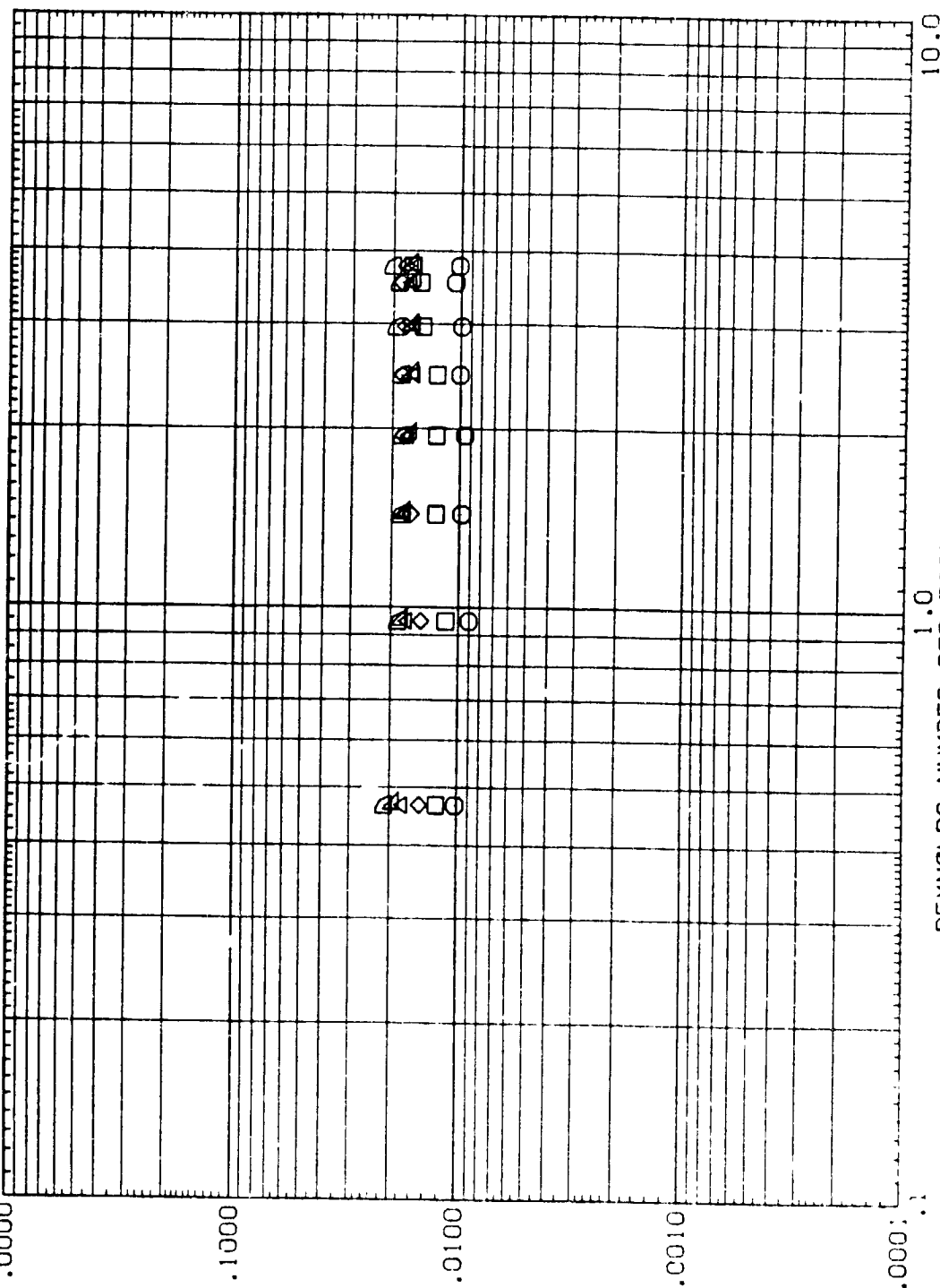


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C.S

OH-4 (AEDC V-11B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

SYMBOL T/C NO TRACE ALPHA
 13.000 1.000 19.710
 14.000
 15.000
 16.000
 17.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, $g_{H/REF}$

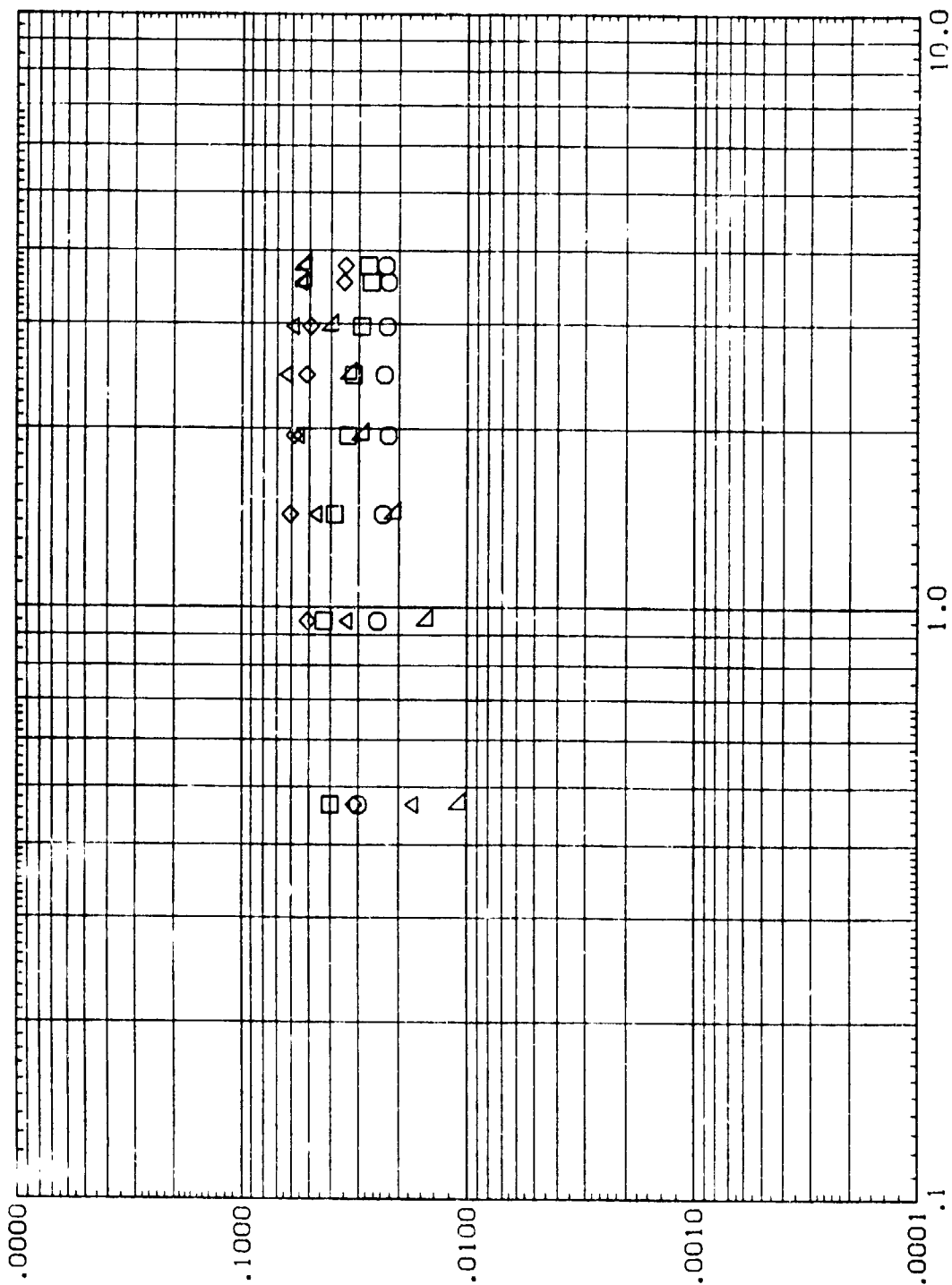


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C.S

3H-7 (AFDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL T/C NO IFACE ALPHA

□ 7.000
 □ 8.00
 □ 9.0
 ▽ 10.00
 ▽ 11.000
 ▽ 12.000

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

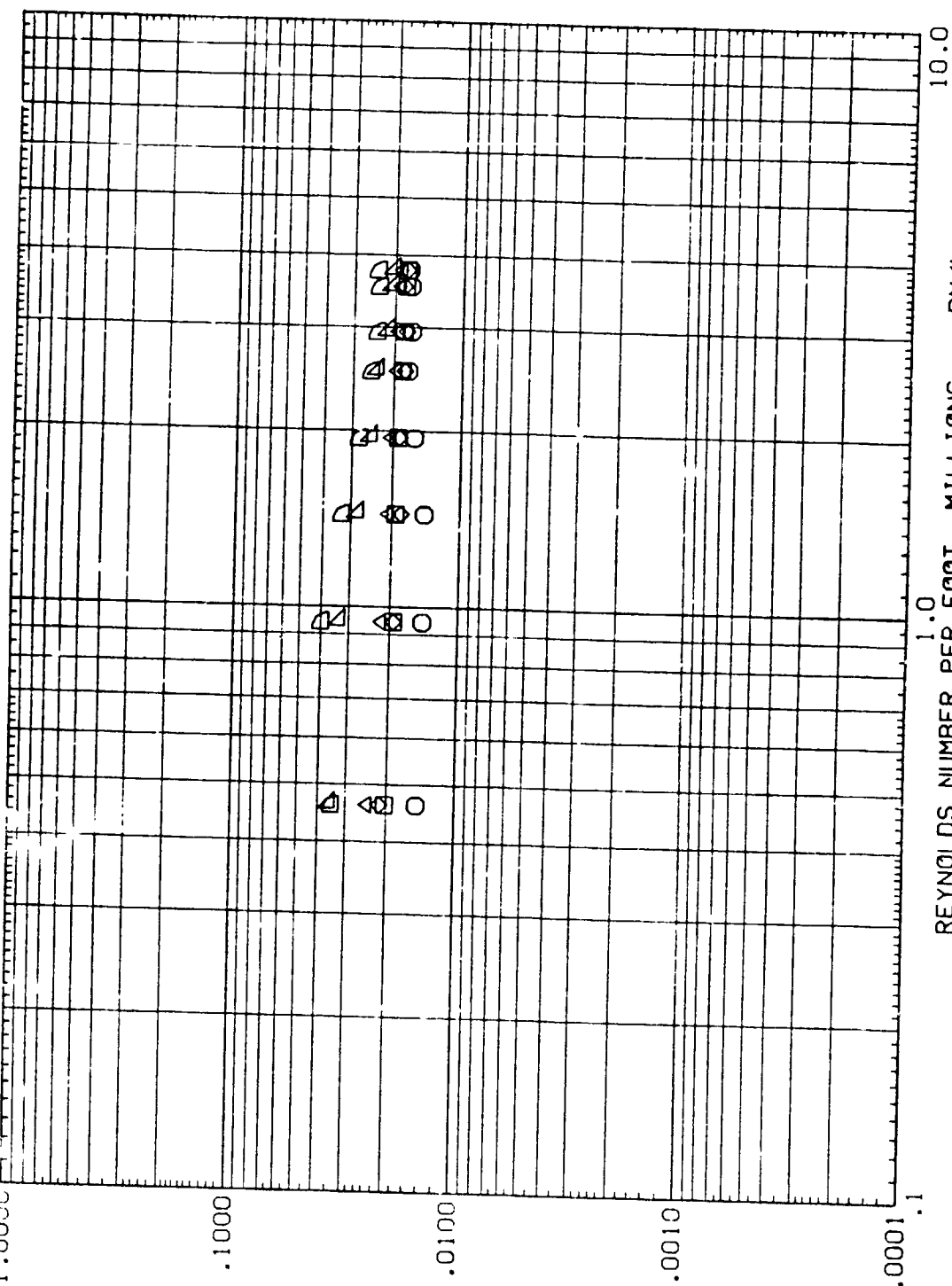


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S
 REYNOLDS NUMBER PER FOOT, MILLIONS. RN/L
 PAGE 117

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL T/C NO TRACE ALPHA
 13.000 1.000 24.830
 14.000
 15.000
 16.000
 17.000

PARAMETRIC VALUES
 BETA .000 MACH .000
 ELEVON .000 RUDDER .000

MEASURED TO THEN. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/REF

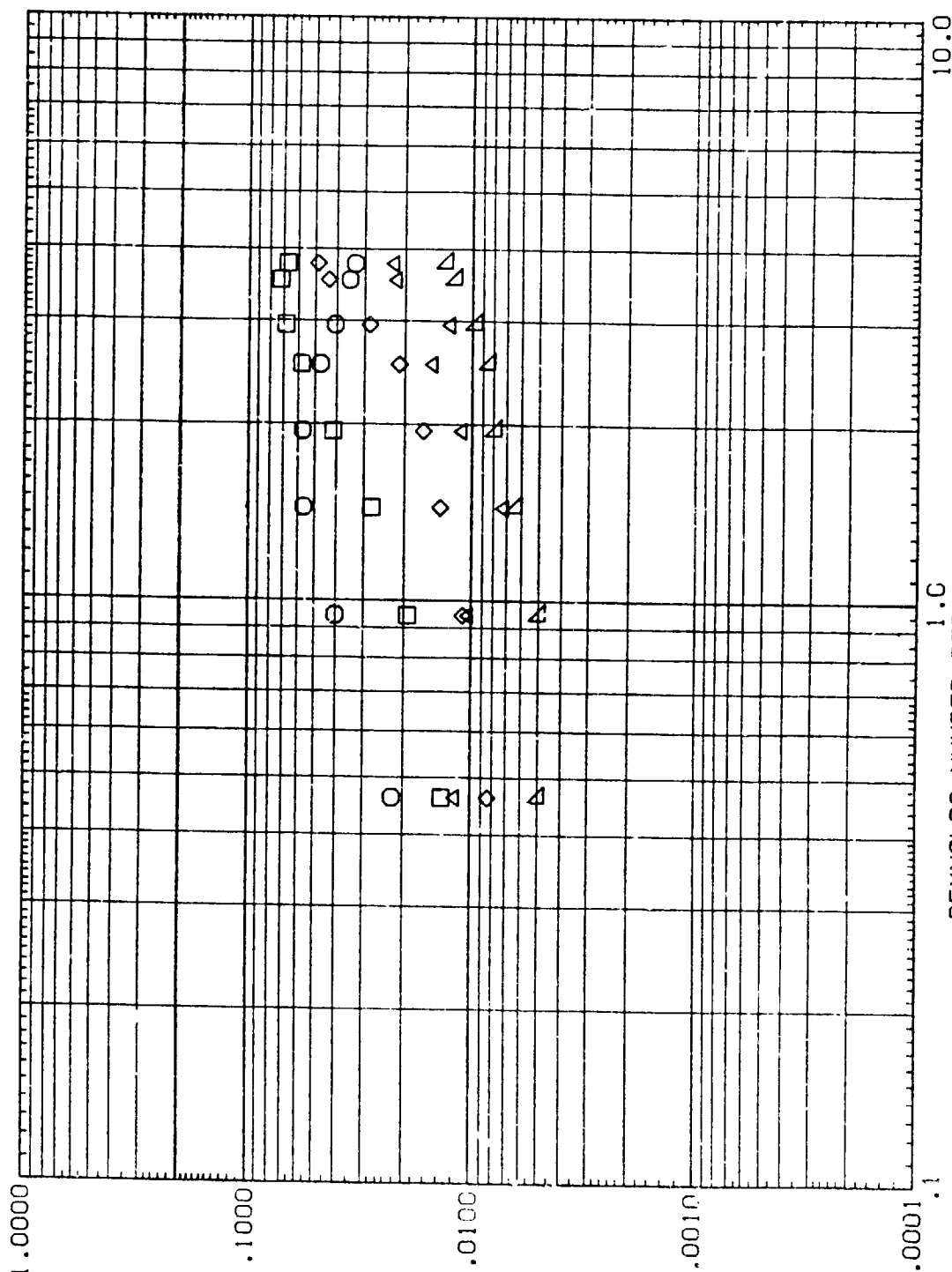


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

OH-74 (AFDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 .000 MACH 8.000
 .000 RUDDER .000

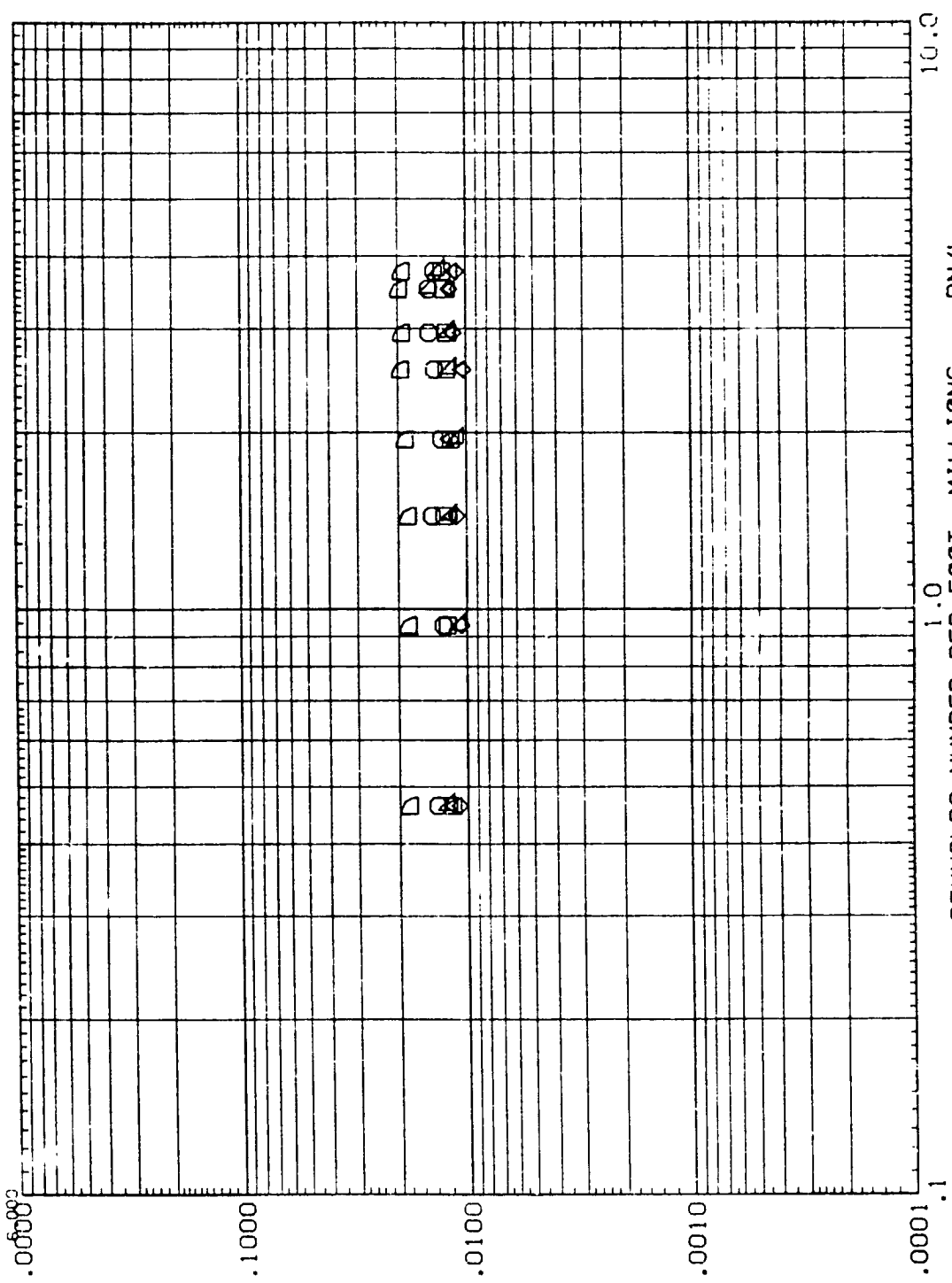
BETA
 ELEVON

TRACE ALPHA
 1.000 29.770

T/C NO
 1.000
 2.000
 3.000
 4.000
 5.000
 6.000

SYMBOL
 □
 ◇
 △
 ▽
 ○
 ●

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HRF



REYNOLDS NUMBER PER FOOT. MILLIONS. RN/L

FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

REPRODUCTION OF THE
ORIGINAL FIGURE IS POOR

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB0001)

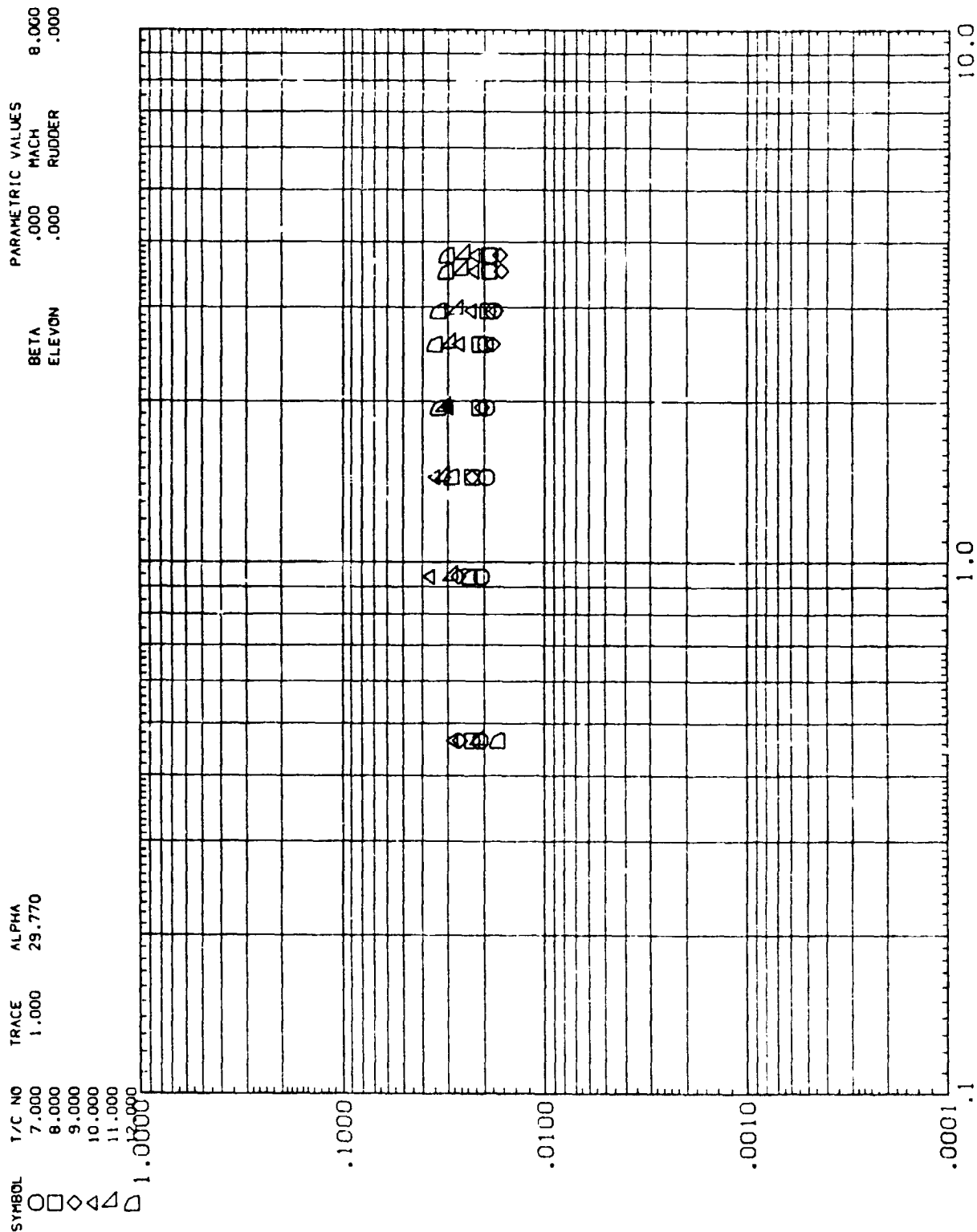


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

QH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
○	13.000	1.000	29.770	.000	.000	8.000
□	14.000			.000		.000
◇	15.000					
△	16.000					
▽	17.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

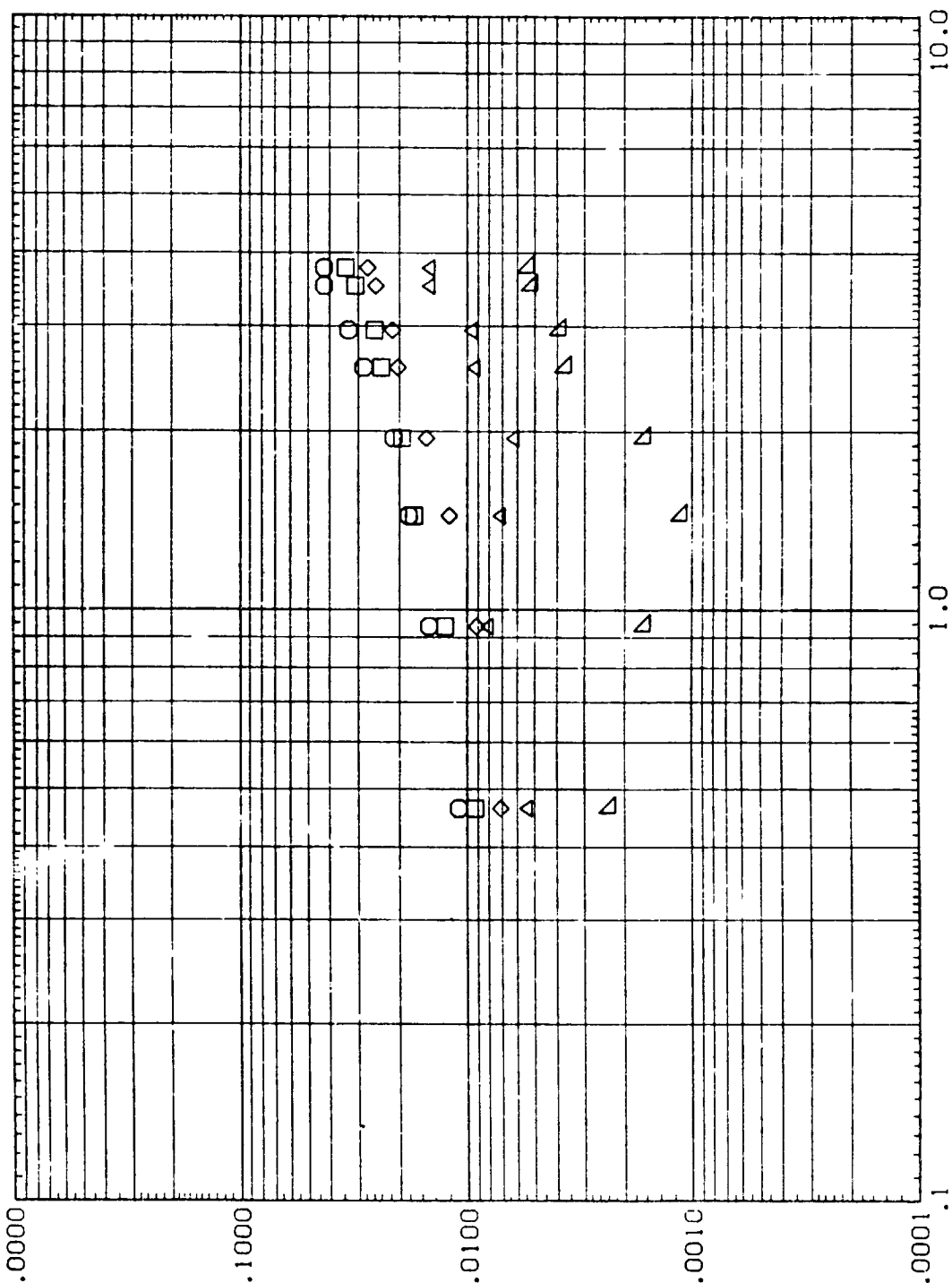


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE ALPHA
 1.000 34.760

SYMBOL
 1.000
 2.000
 3.000
 4.000
 5.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

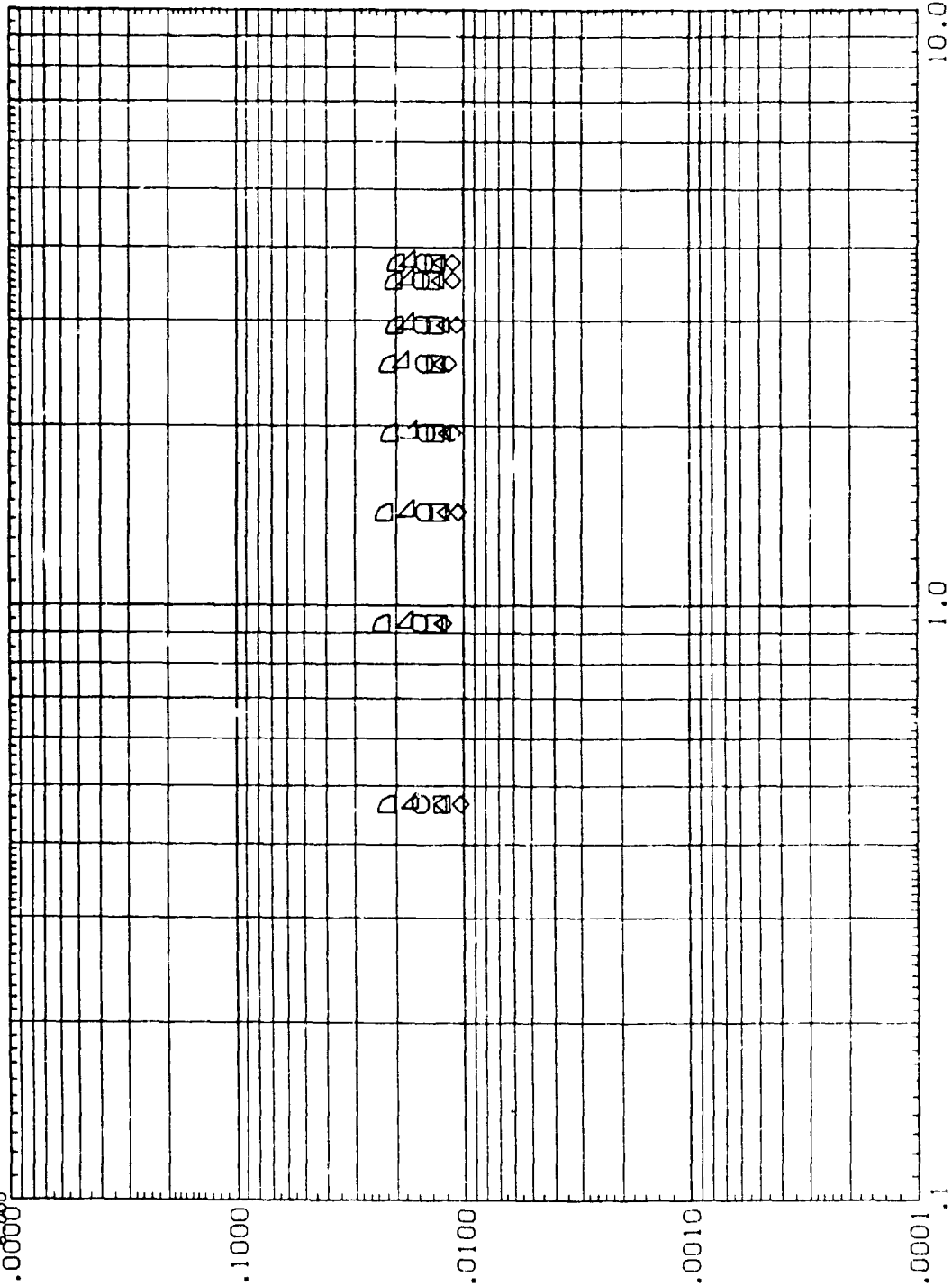


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE 1/C.S
 REYNOLDS NUMBER PER FOOT. MILLIONS. RN/L
 PAGE 122

PH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C ID	TRACE	ALPHA	BETA	PARAMETRIC VALUES
○	7.000	1.000	34.760	ELEVON	.000
□	8.000			MACH	8.000
◇	9.000			RUDDER	.000
▽	10.000				
△	11.000				
▽	12.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

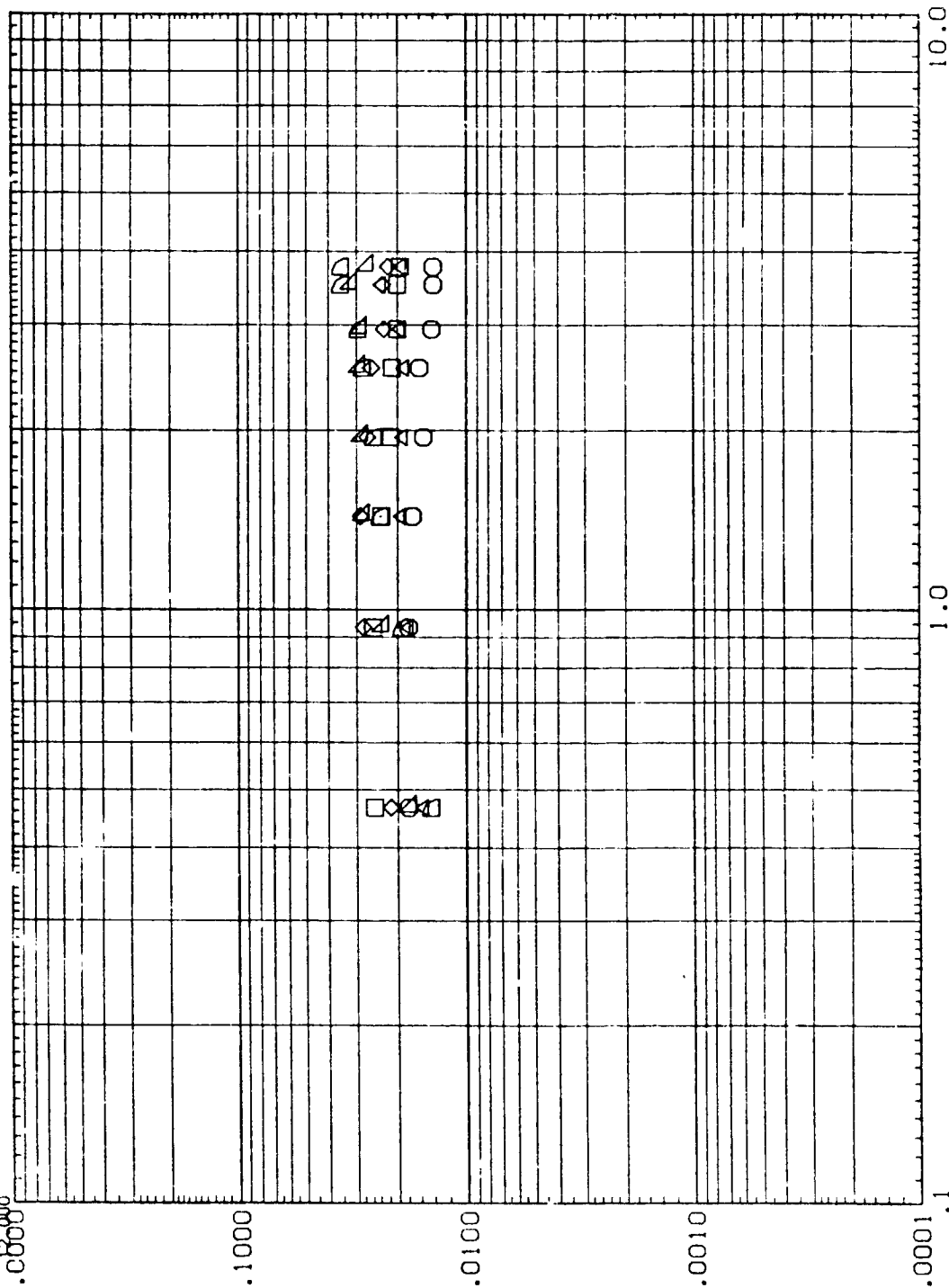


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL T/C NO TRACE ALPHA
 13.000 1.000 34.760
 14.000
 15.000
 16.000
 17.000

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

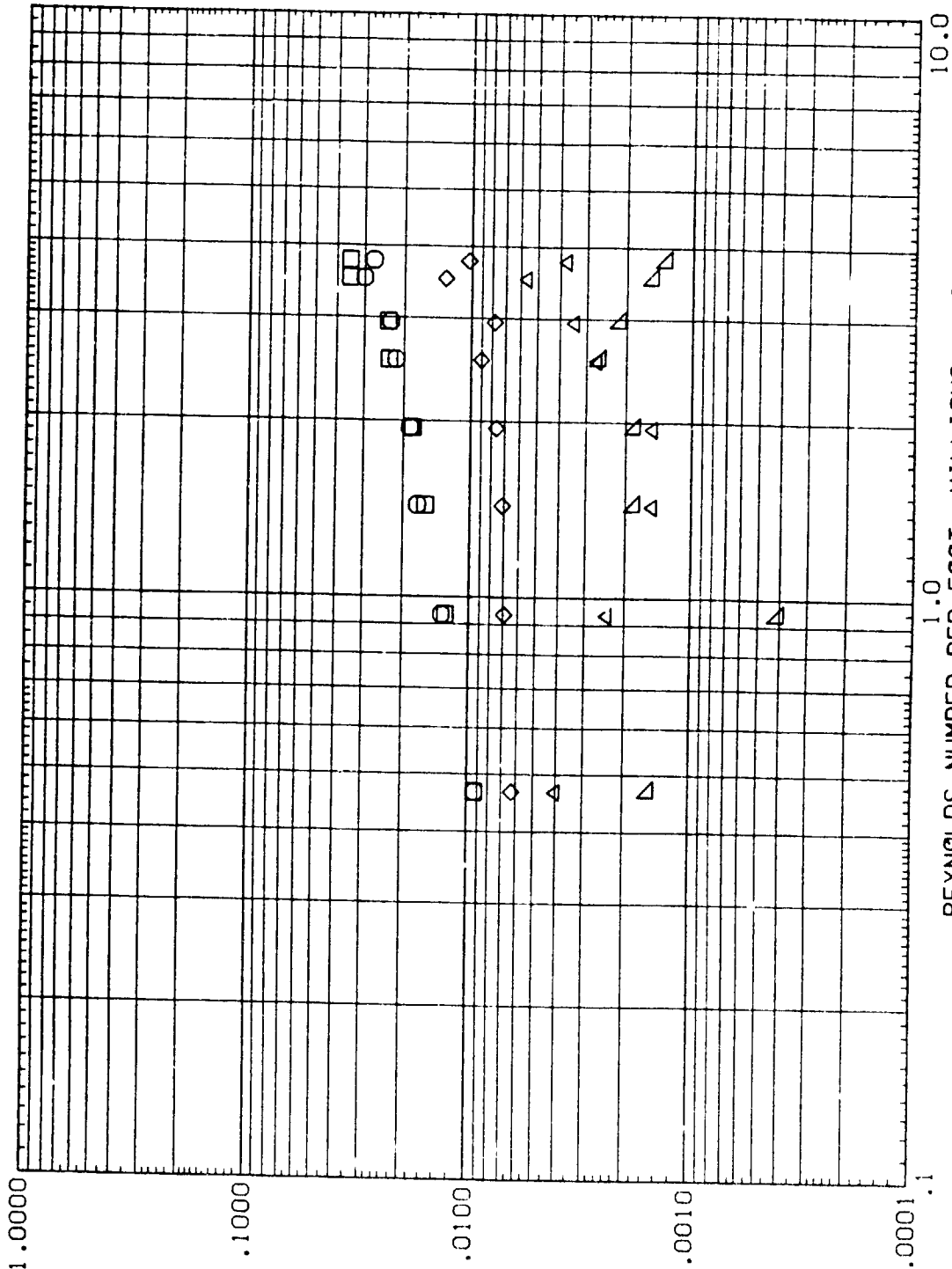


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

T/C NO 1.000
 SPACE .000
 ALPHA 39.790

SYMBOL
 □
 ▽
 ◇
 ◊
 ○

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

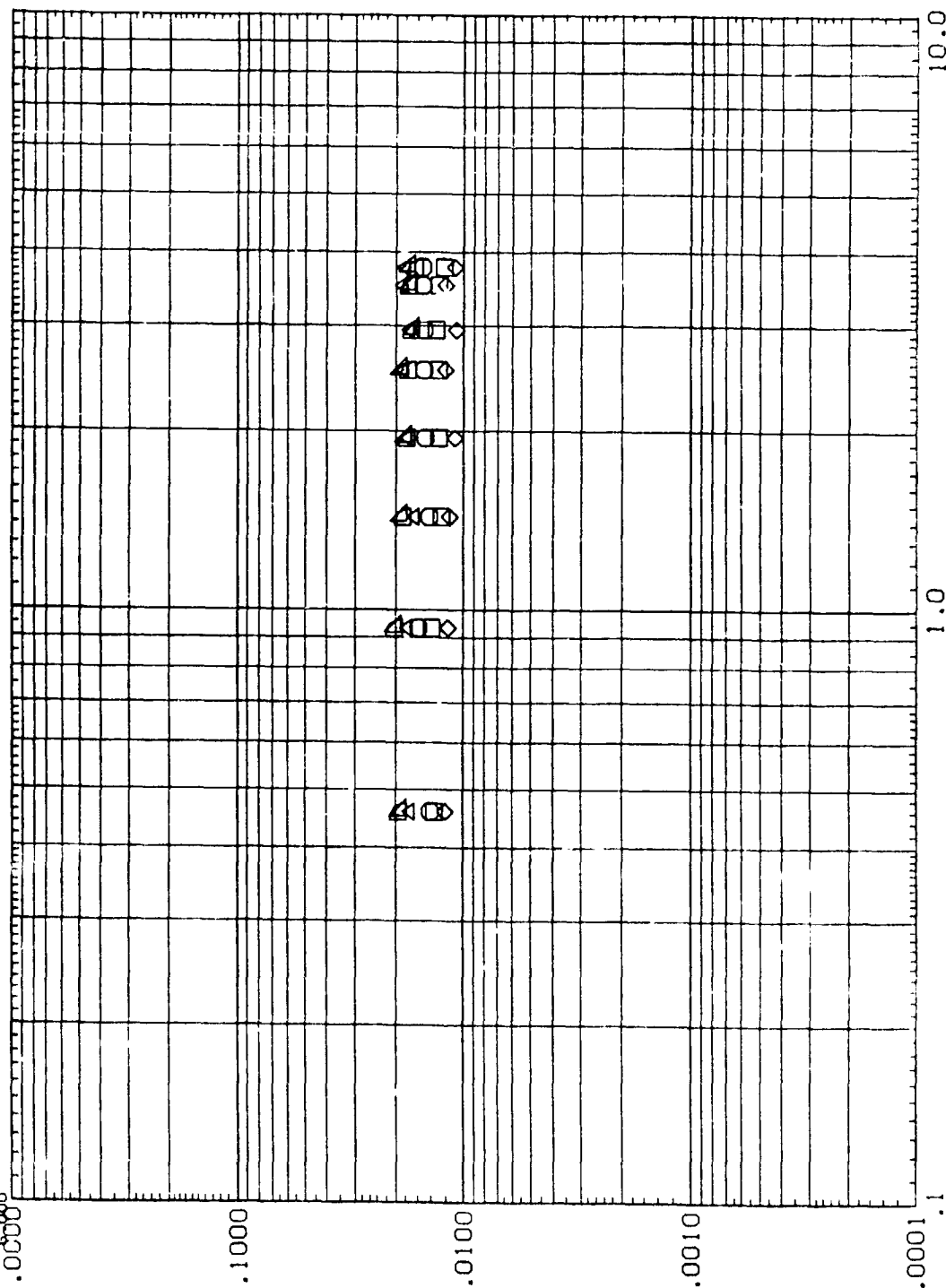


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

GH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 .000 MACH 8.000
 .000 RUDDER .000

BETA
 ELEVON

TRACE ALPHA
 1.000 39.790

T/C NO
 7.000
 8.000
 9.000
 10.000
 11.000
 12.000

SYMBOL
 □ ▽ ◆ ◇ □ □

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

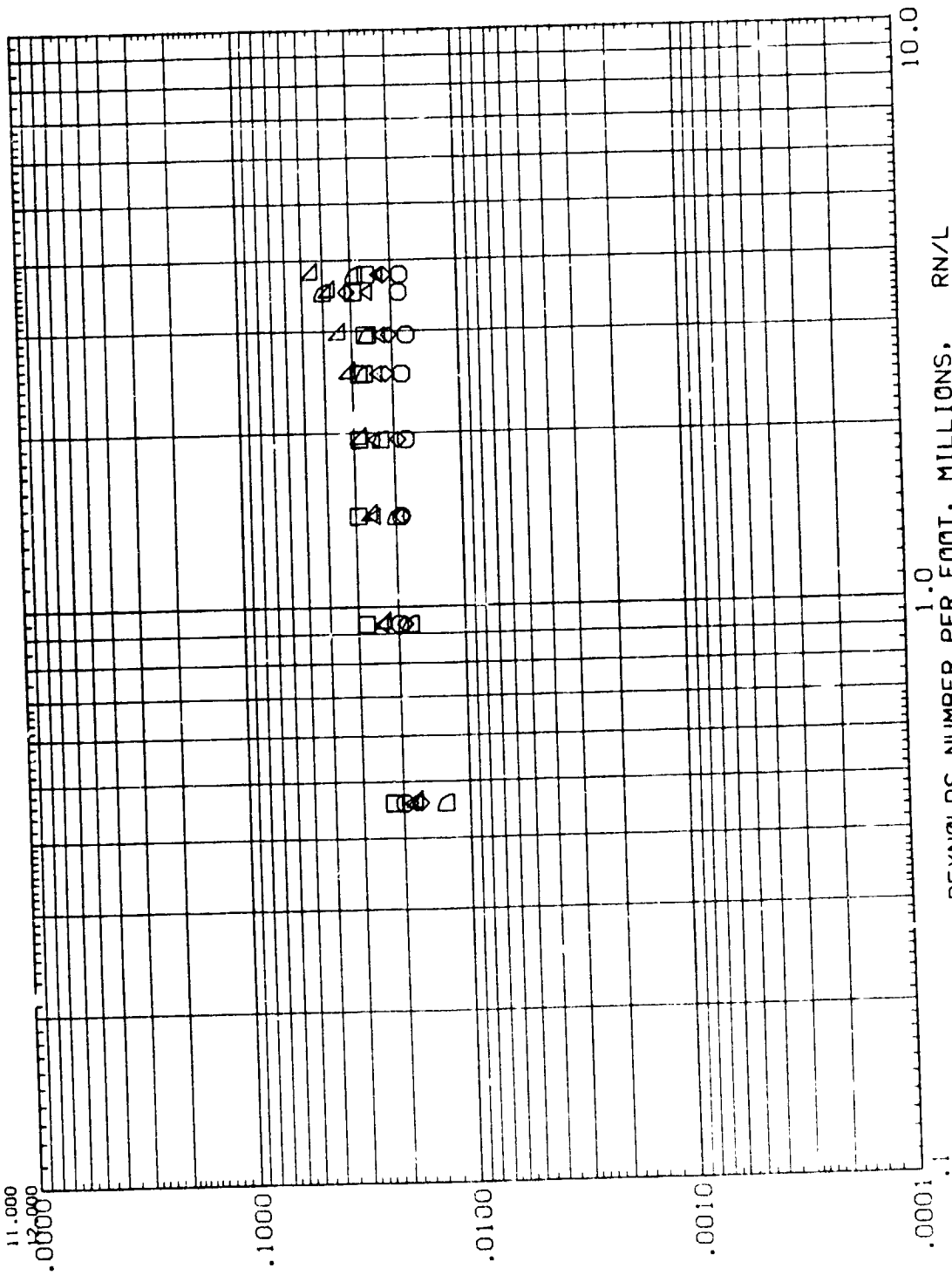
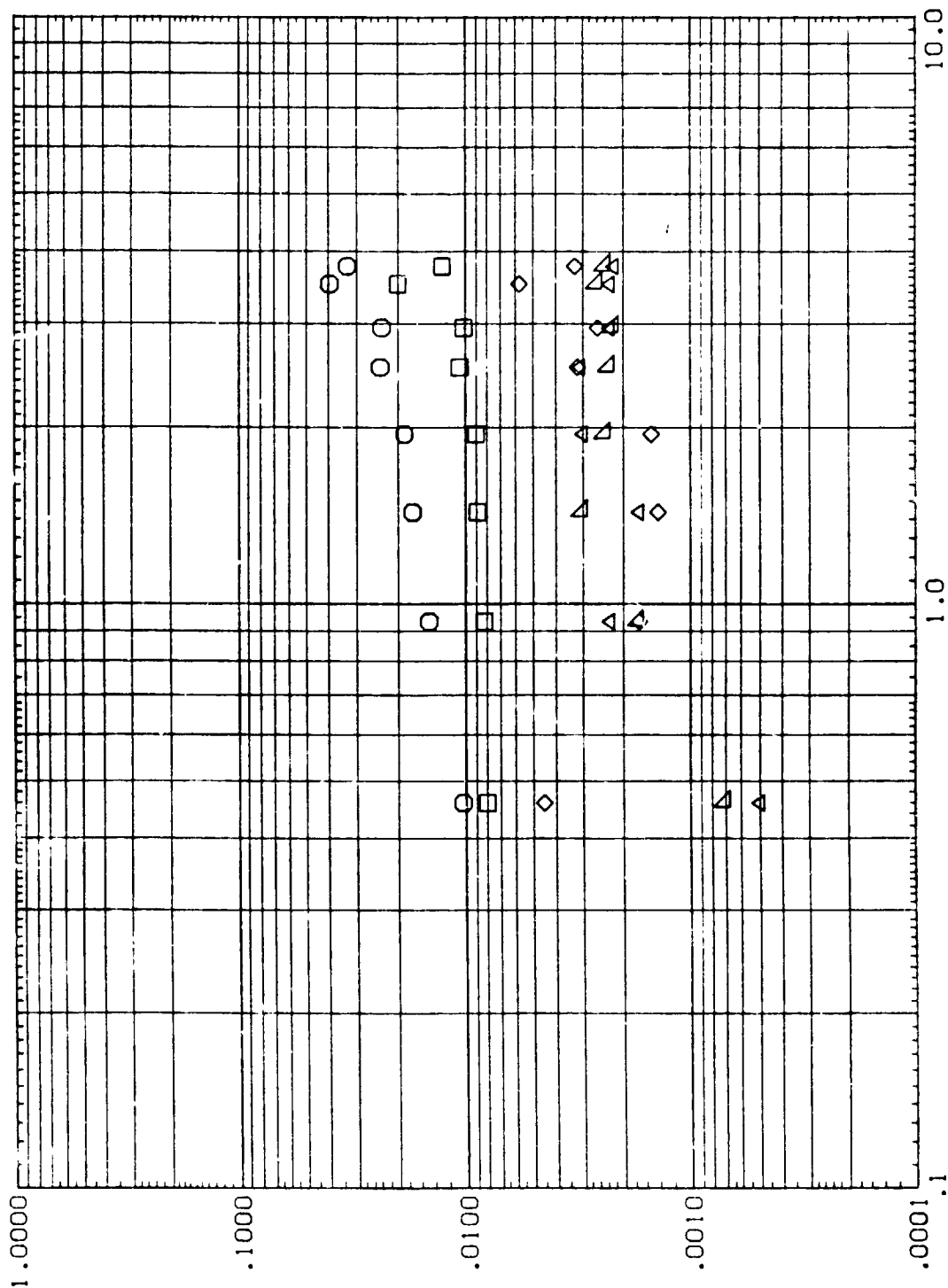


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S
 REYNOLDS NUMBER PER FOOT, MILLIONS, RN/L
 PAGE 126

OH-74 (AEDC Y-1B-B8A) B62C12F10M16W127E52V8R19 (SVB0001)

REYNOLDS	T/C	TRACE	ALPHA	PARAMETRIC VALUES		
	13.000	1.000	39.790	BETA	MACH	8.000
	14.000			ELEVON	RUDDER	.000
	15.000					
	16.000					
	17.000					

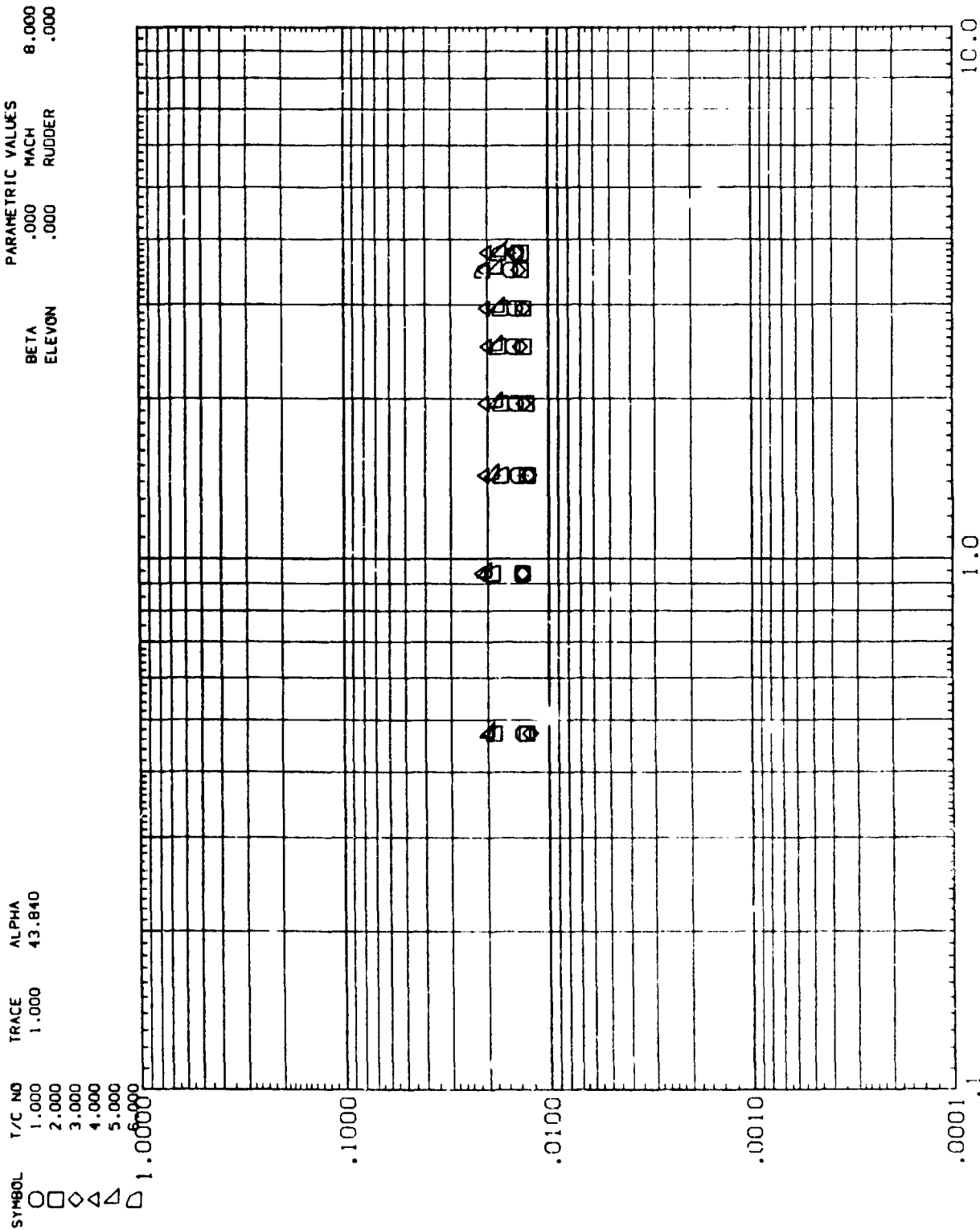


MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF

FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

REPRODUCTION OF THE
ORIGINAL PAPER REPORT

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)



MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C.S

GH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
○	7.000	1.000	43.840	.000	8.000	.000
□	8.000			.000		
◇	9.000					
▽	10.000					
△	11.000					
▽	12.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/REF

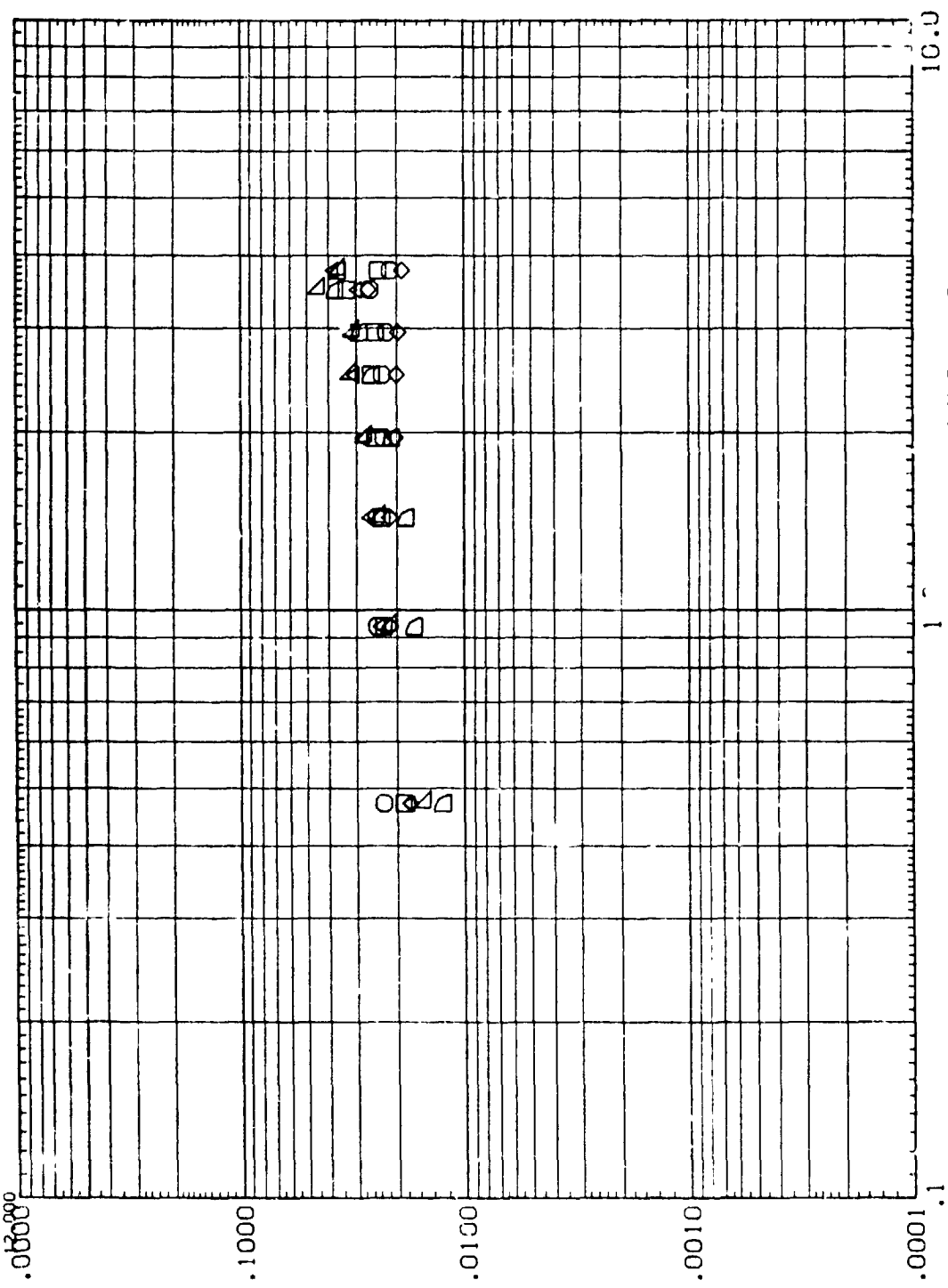


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
BETA .000 MACH 8.000
ELEVON .000 RUDDER .000

T/C NO TRACE ALPHA
13.000 1.000 43.840
14.000
15.000
16.000
17.000

SYMBOL
○
□
◇
▽

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

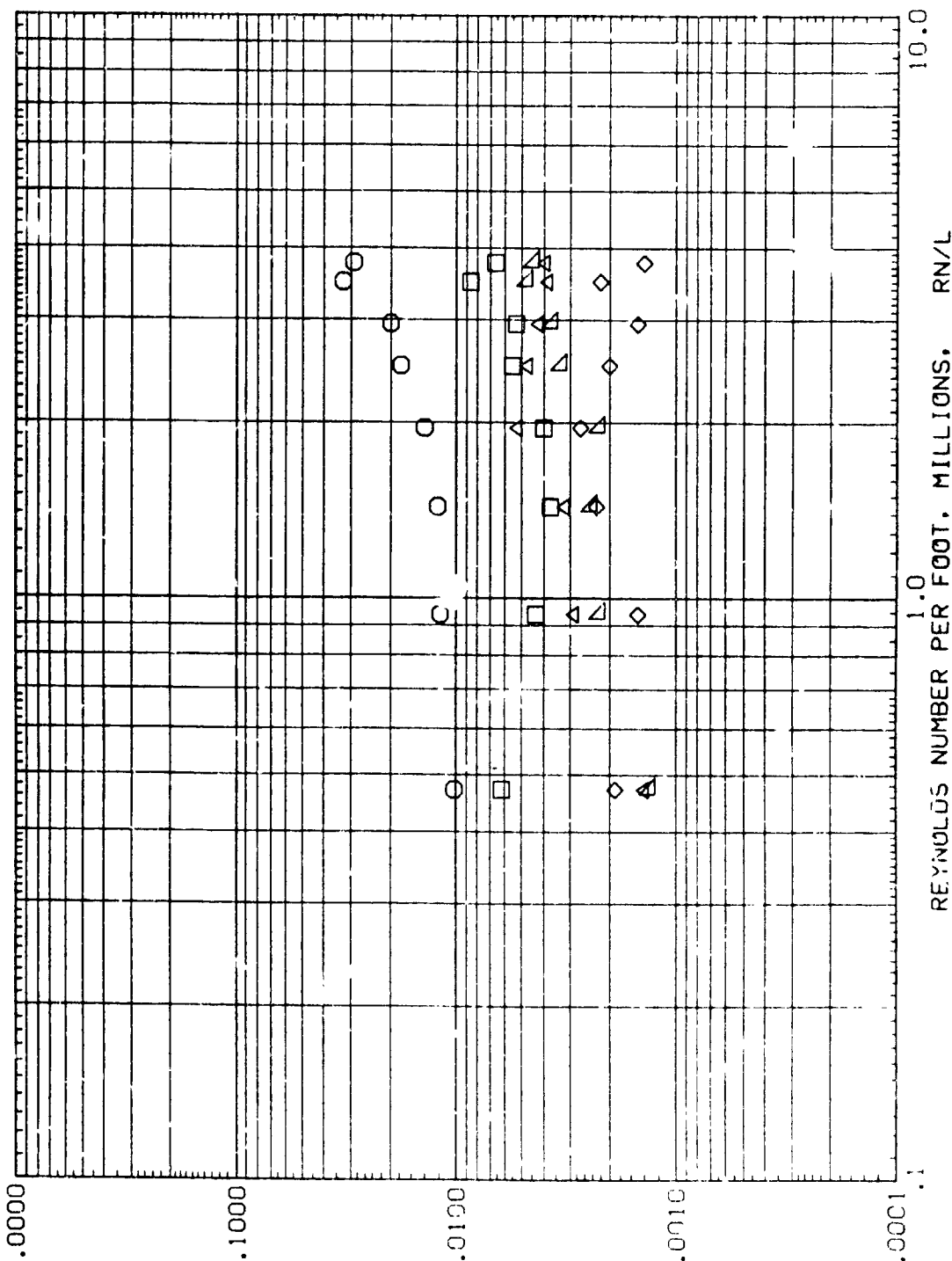


FIG. 24 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR UPPER TANGENT TRACE T/C,S

OH-74 (AF 111 V-11B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	PARAMETRIC VALUES
□	14.000	2.000	19.710	.000	MACH
◇	15.000			.000	RUDDER
◇	19.000				
◇	20.000				
◇	21.000				
◇	22.000				
◇	23.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

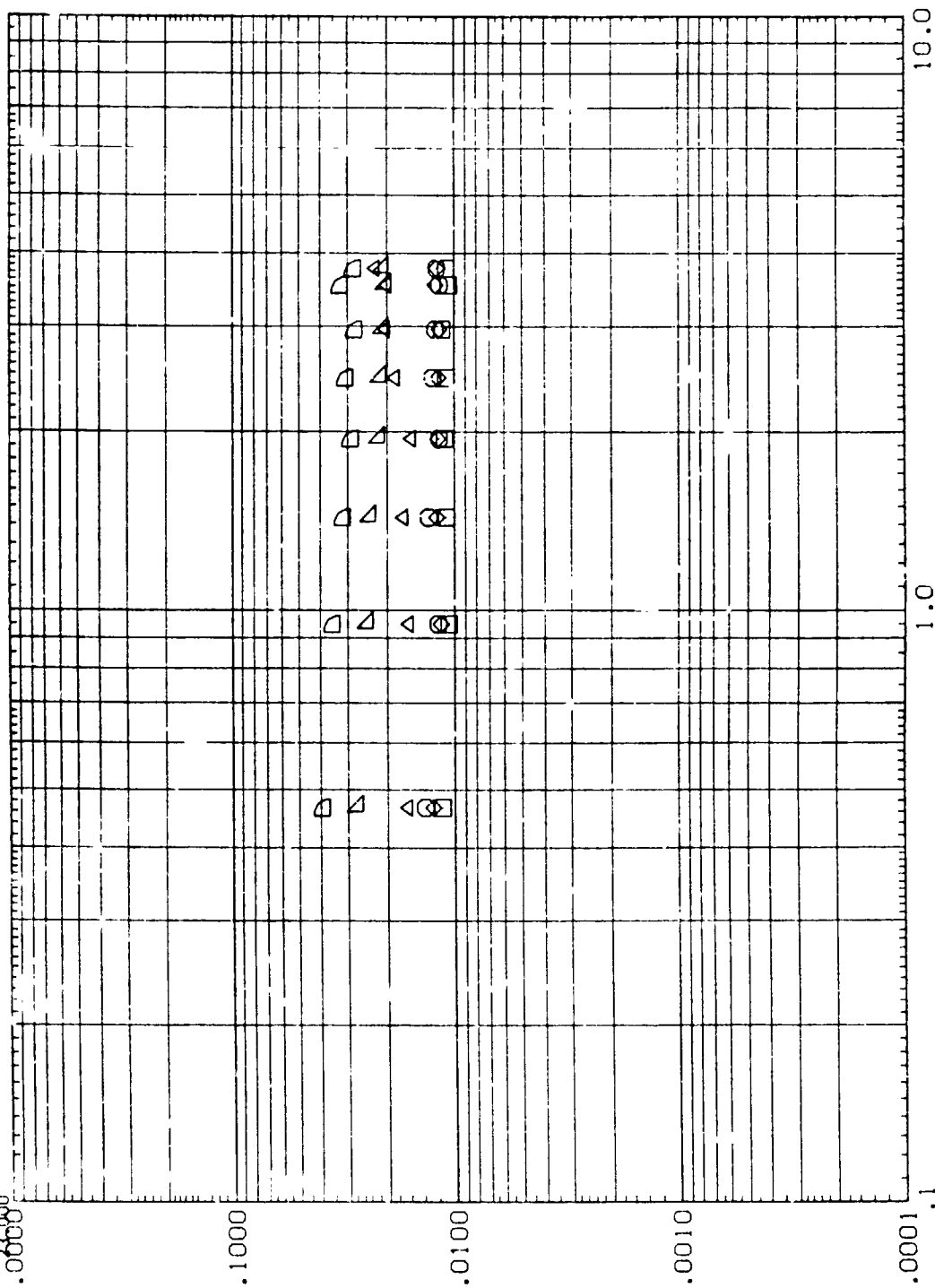


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C.S

REPRODUCED FROM THE
ORIGINAL REPORT

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA ELEVON	.000 MACH	.000 RUDDER	8.000 .000
□	24.000	2.000	19.710				
◇	25.000						
△	26.000						
▽	27.000						
◊	28.000						
◻	29.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

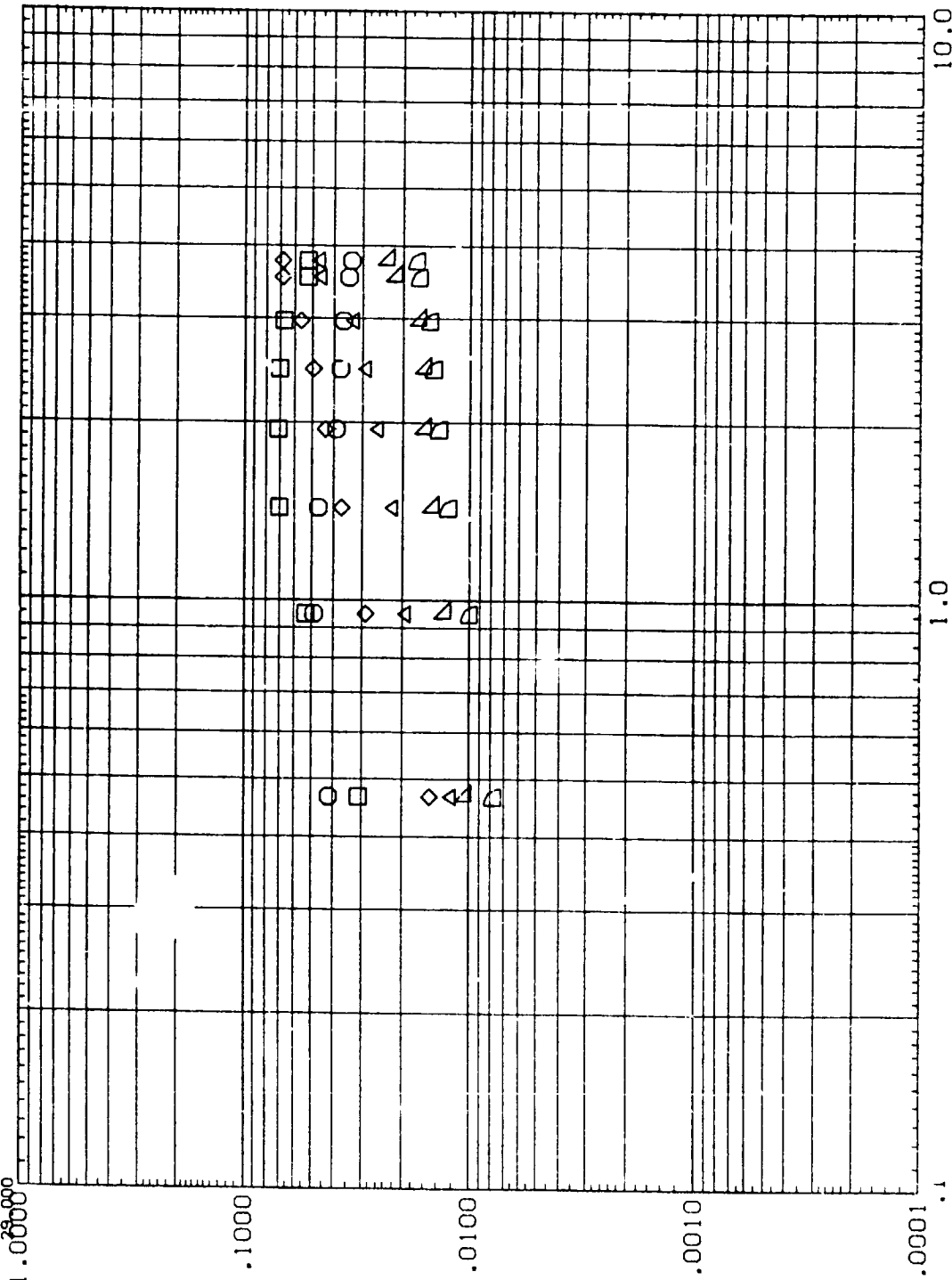


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

1.74 (A DC V41B-E8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

SYMBOL T/C 30.0 TRACE 2.000 ALPHA 19.710

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

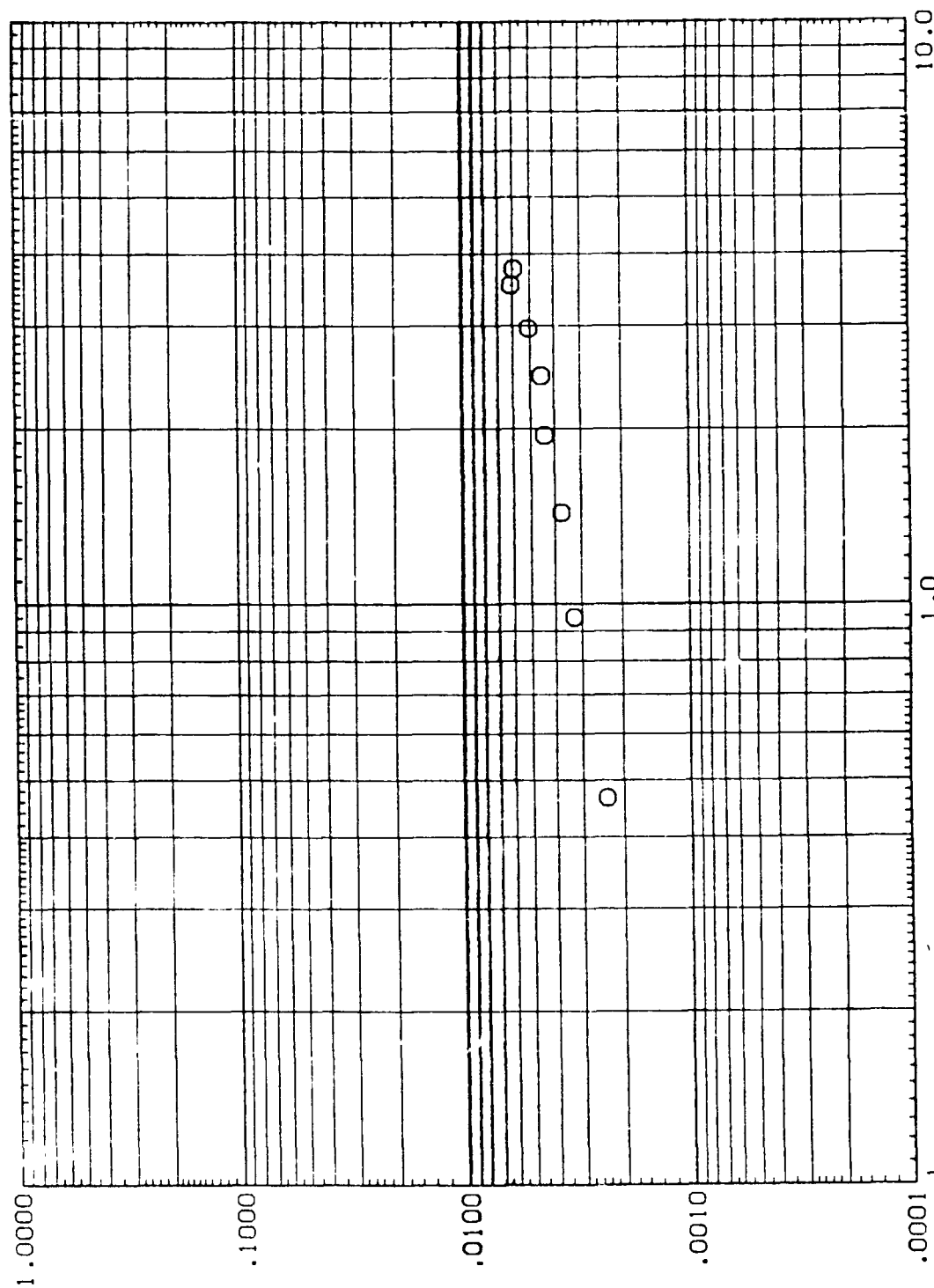


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C.5

OH-74 (AEDC V41B-R8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	PARAMETRIC VALUES
□	18.000	2.000	24.830	.000	MACH .000
◇	19.000			.000	RUDDER .000
◇	20.000				
◇	21.000				
◇	22.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

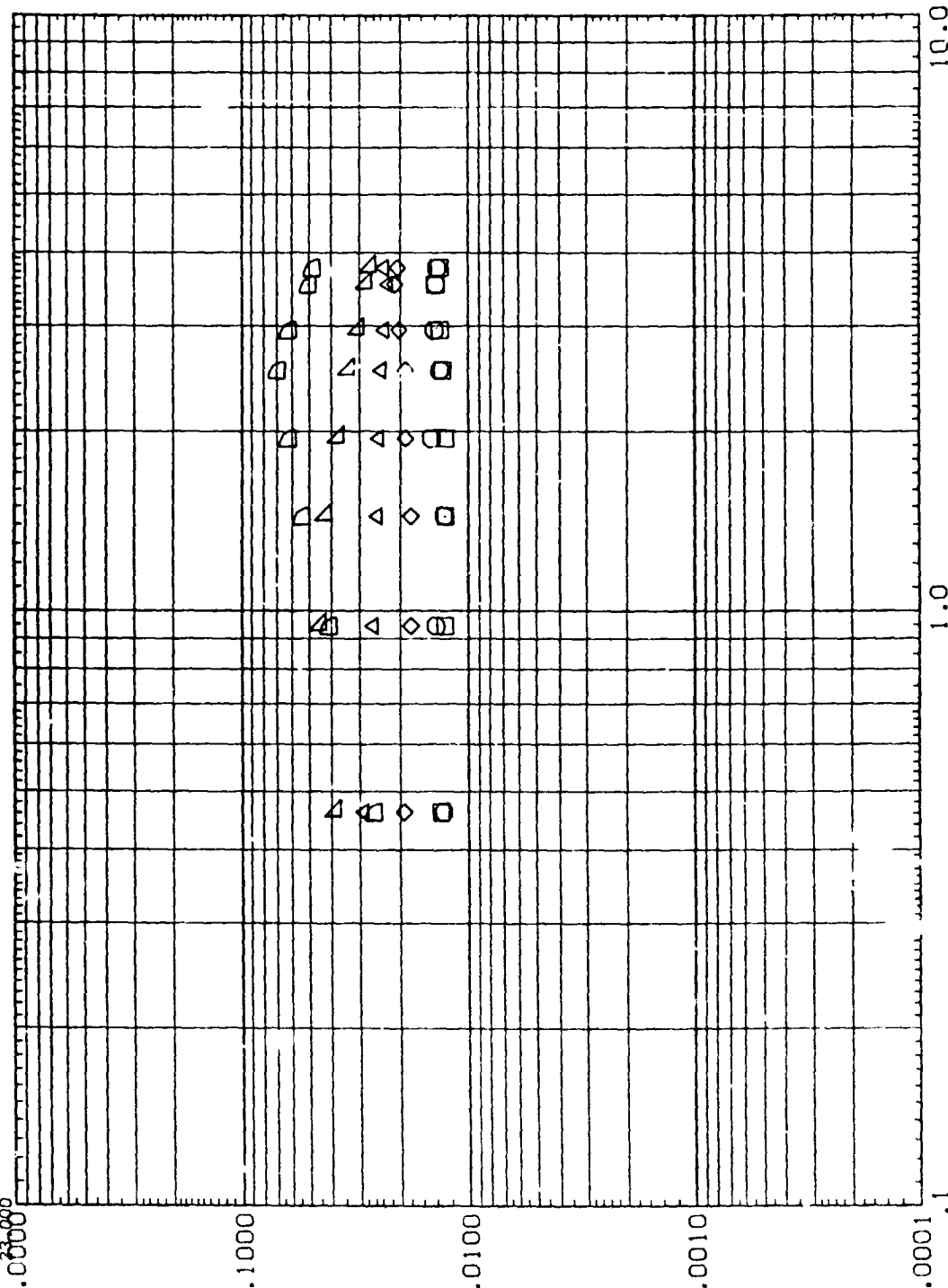


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

0H-74 (AEDC 41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	PARAMETRIC VALUES
○	24.000	2.000	24.830	ELEVON	.000 MACH .000 RUDDER
□	25.000				
◇	26.000				
△	27.000				
▽	28.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

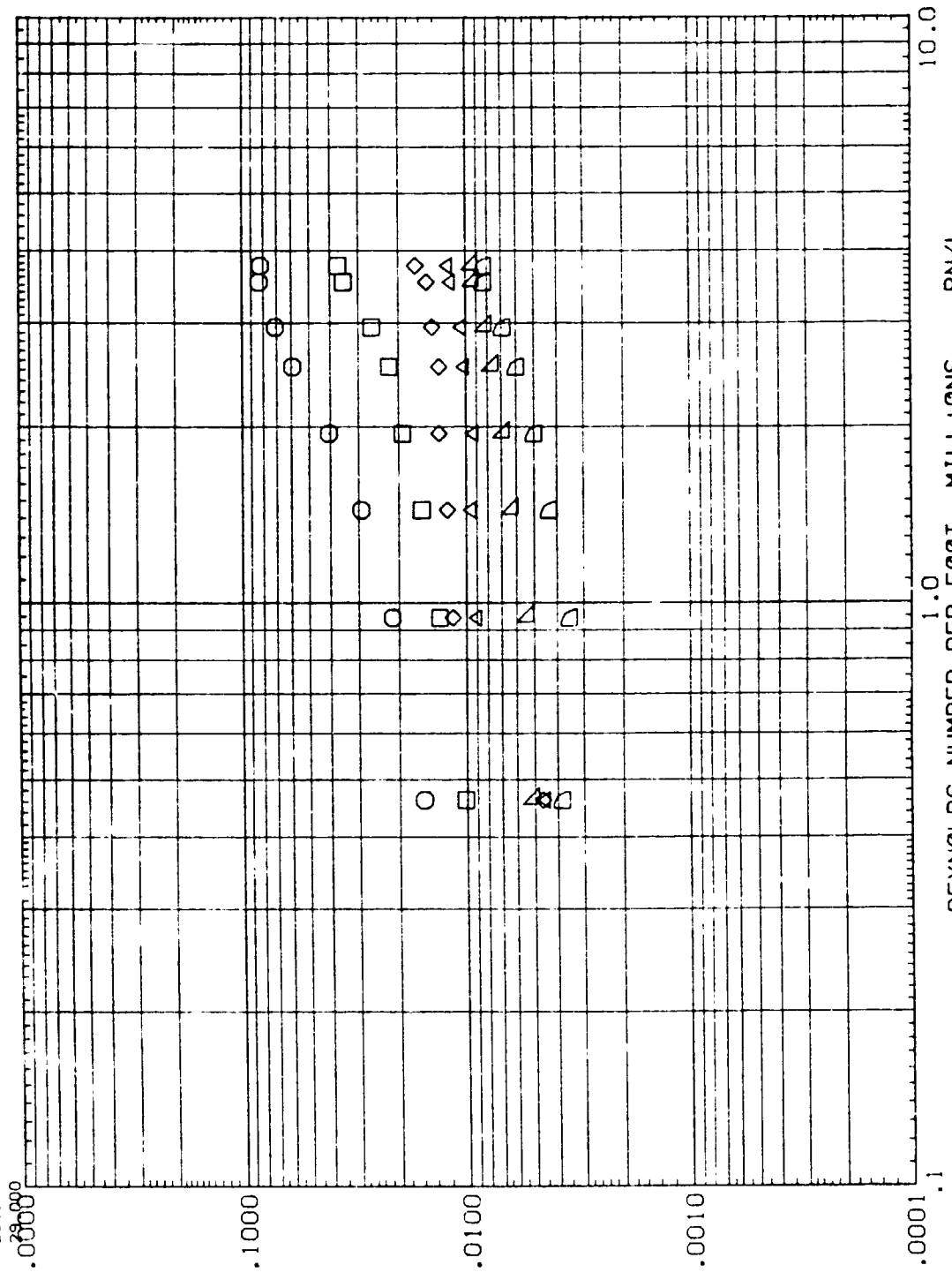


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C.S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL \bigcirc T/C NO 30.000 TRACE 2.000 ALPHA 24.830

PARAMETRIC VALUES
BETA .000 MACH 8.000
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

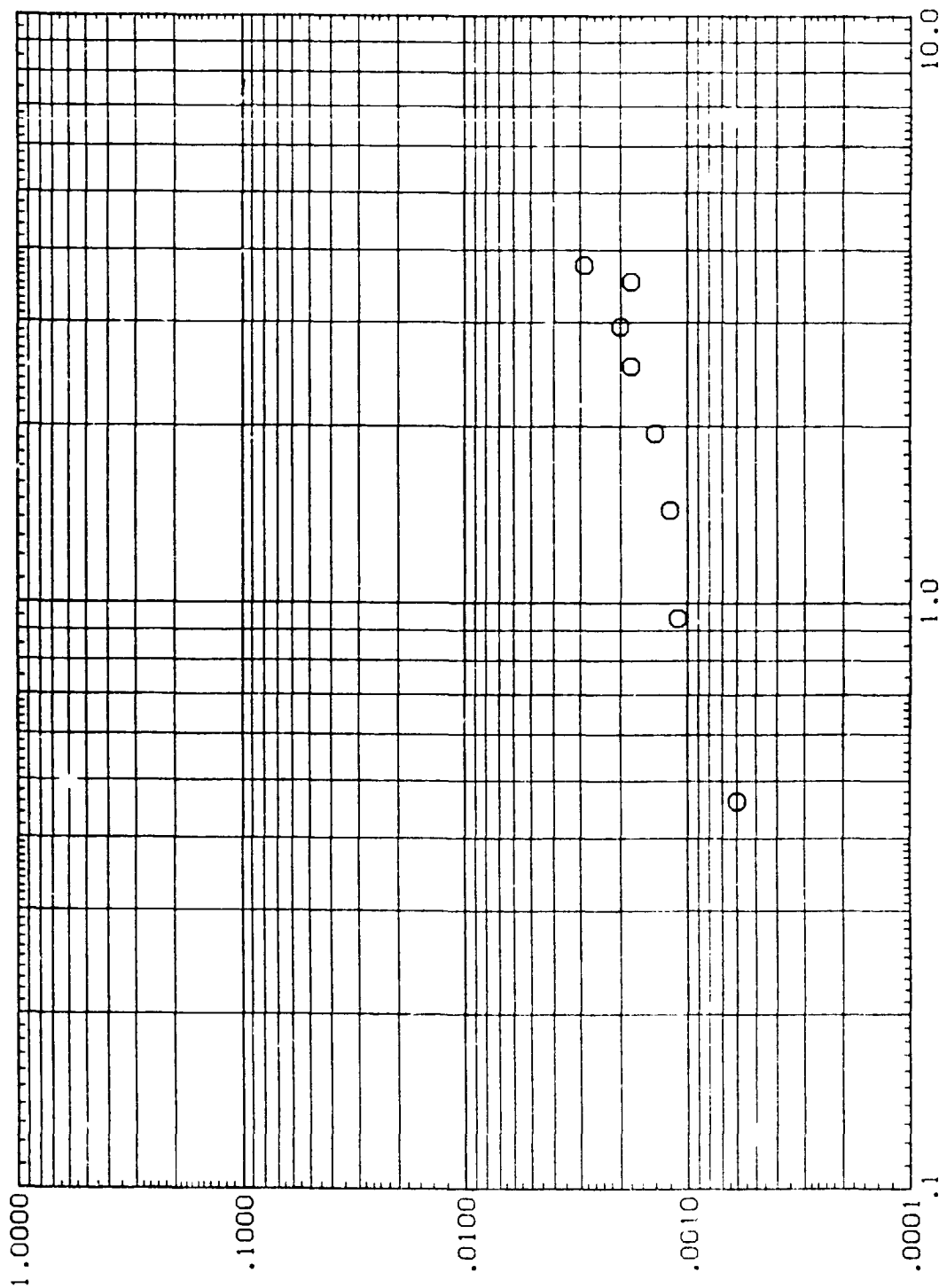


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES	
BETA	MACH
ELEVON	RUDDER
.000	.000
.000	.000

SYMBOL	T/C NO	TRACE	ALPHA
○	18.000	2.000	29.770
□	19.000		
△	20.000		
▽	21.000		
◇	22.000		

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

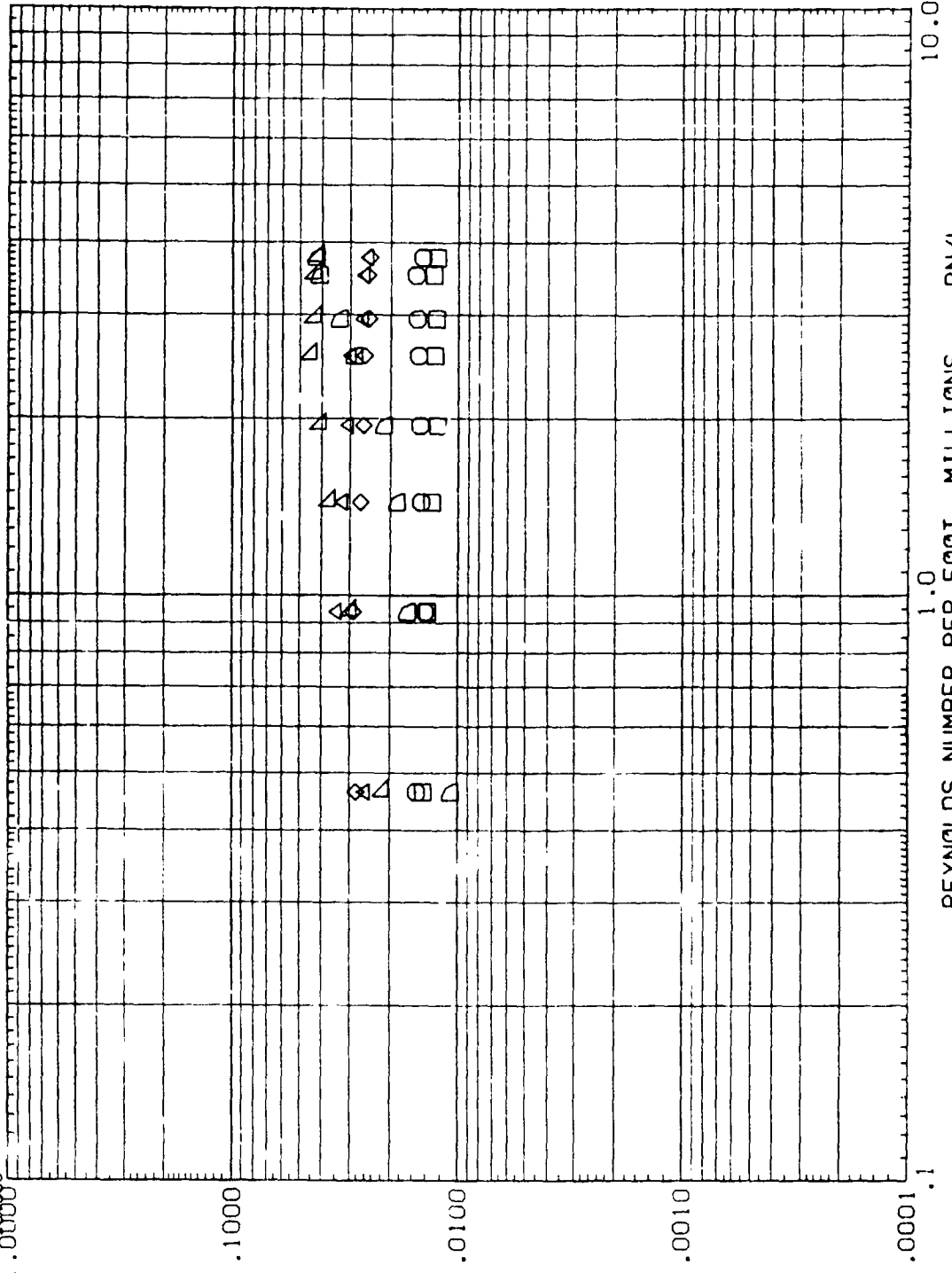


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
□	24.000	2.000	29.770	BETA	.000	MACH
◇	25.000			ELEVON	.000	RUDDER
△	26.000					
▽	27.000					
▽	28.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

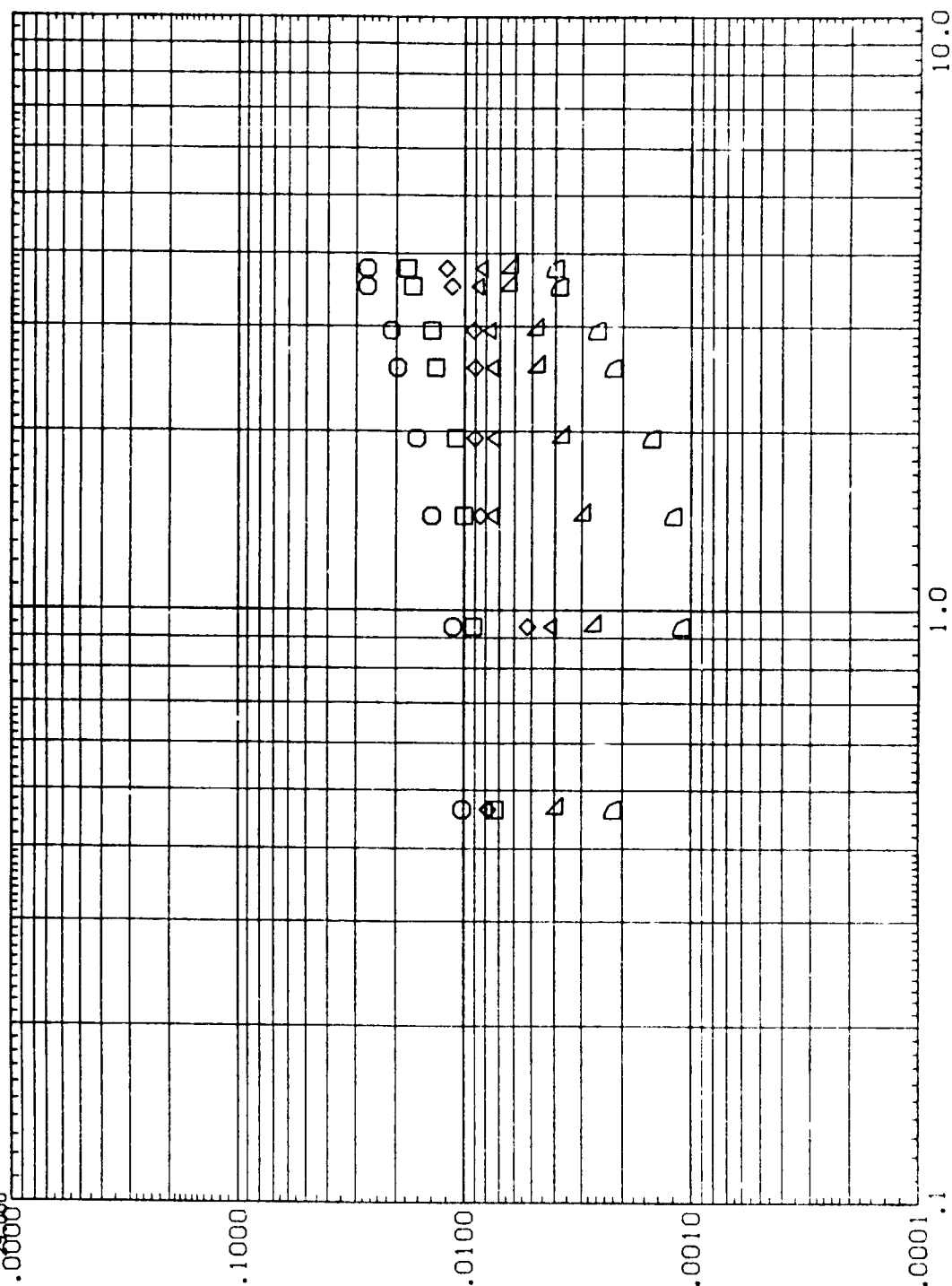


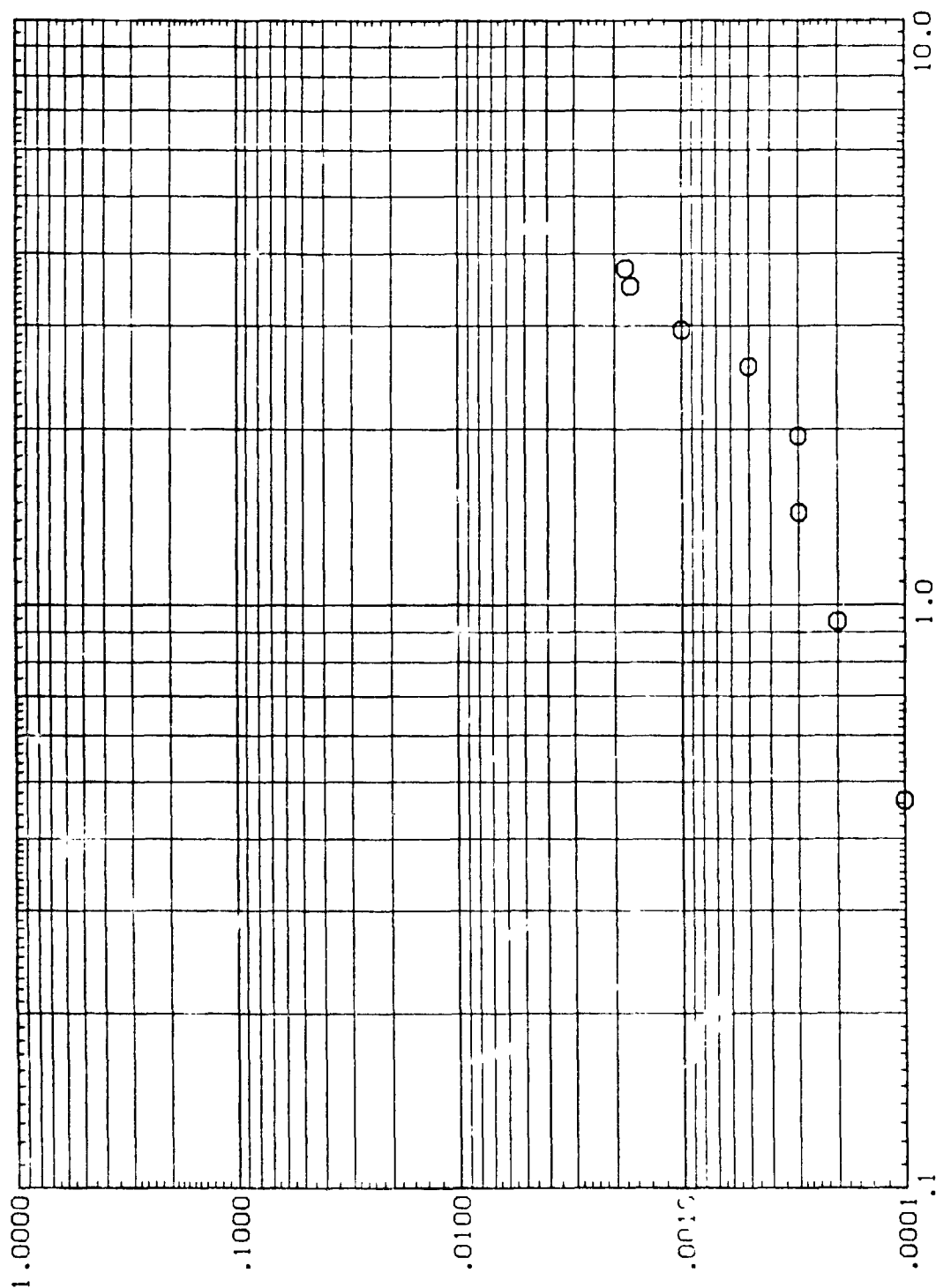
FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

QH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL T/C NO TRACE ALPHA
 ○ 30.000 2.000 29.770

PARAMETRIC VALUES
 BETA ELEVON .000 RUDDER .000
 MACH .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF



REYNOLDS NUMBER PER FOOT, MILLIONS. RN/L

FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
□	18.000	2.000	34.760	.000	8.000	.000
□	19.000			.000		
◇	20.000					
◇	21.000					
◇	22.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

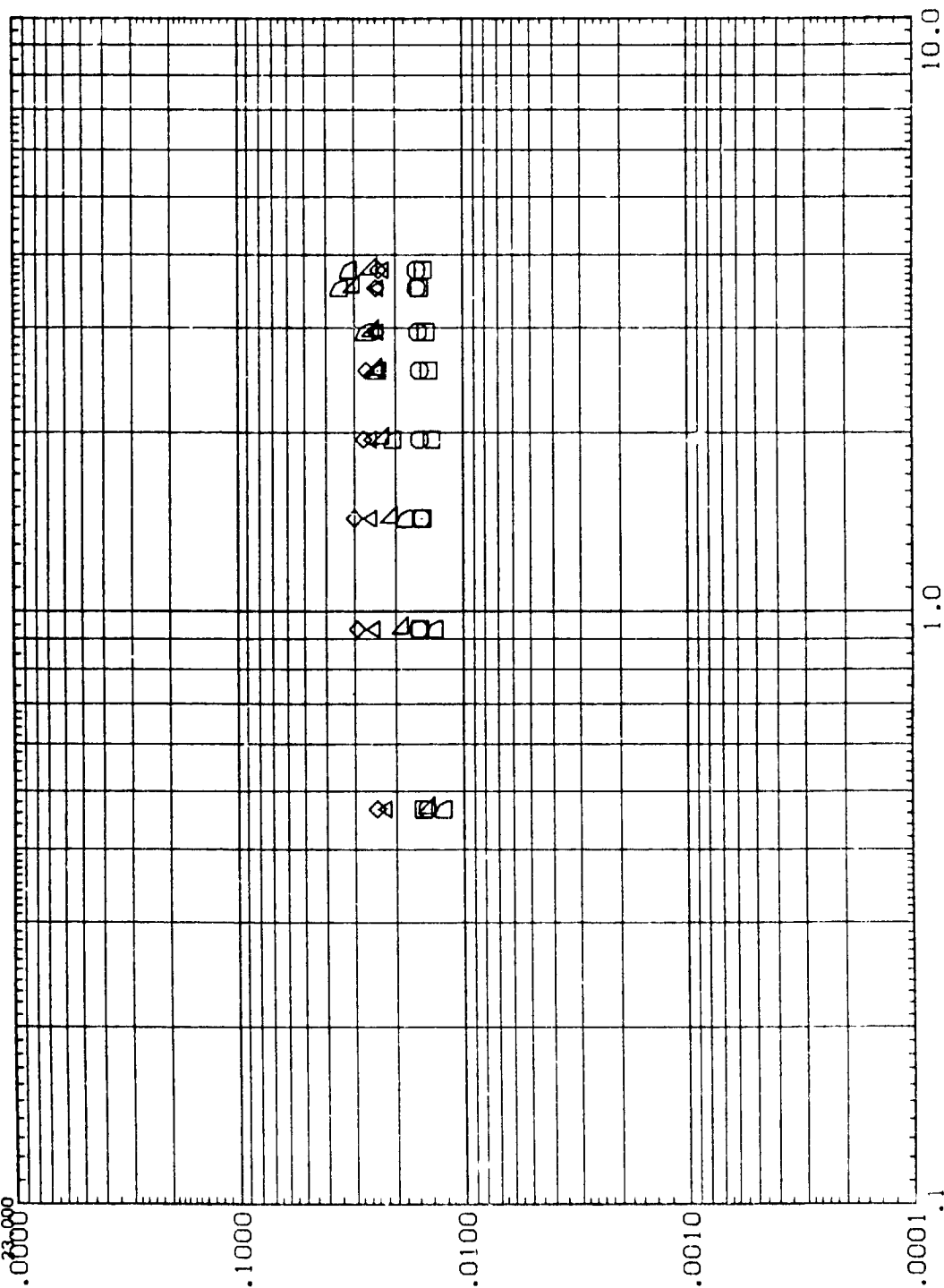


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

QH-74 (AEDC V-1B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 BETA .000 MACH .000
 ELEVON .000 RUDDER .000

TRACE ALPHA
 2.000 34.760

T/C NO
 24.000
 25.000
 26.000
 27.000
 28.000

SYMBOL
 □ ◇ △ ▽ ▿

BASED ON THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

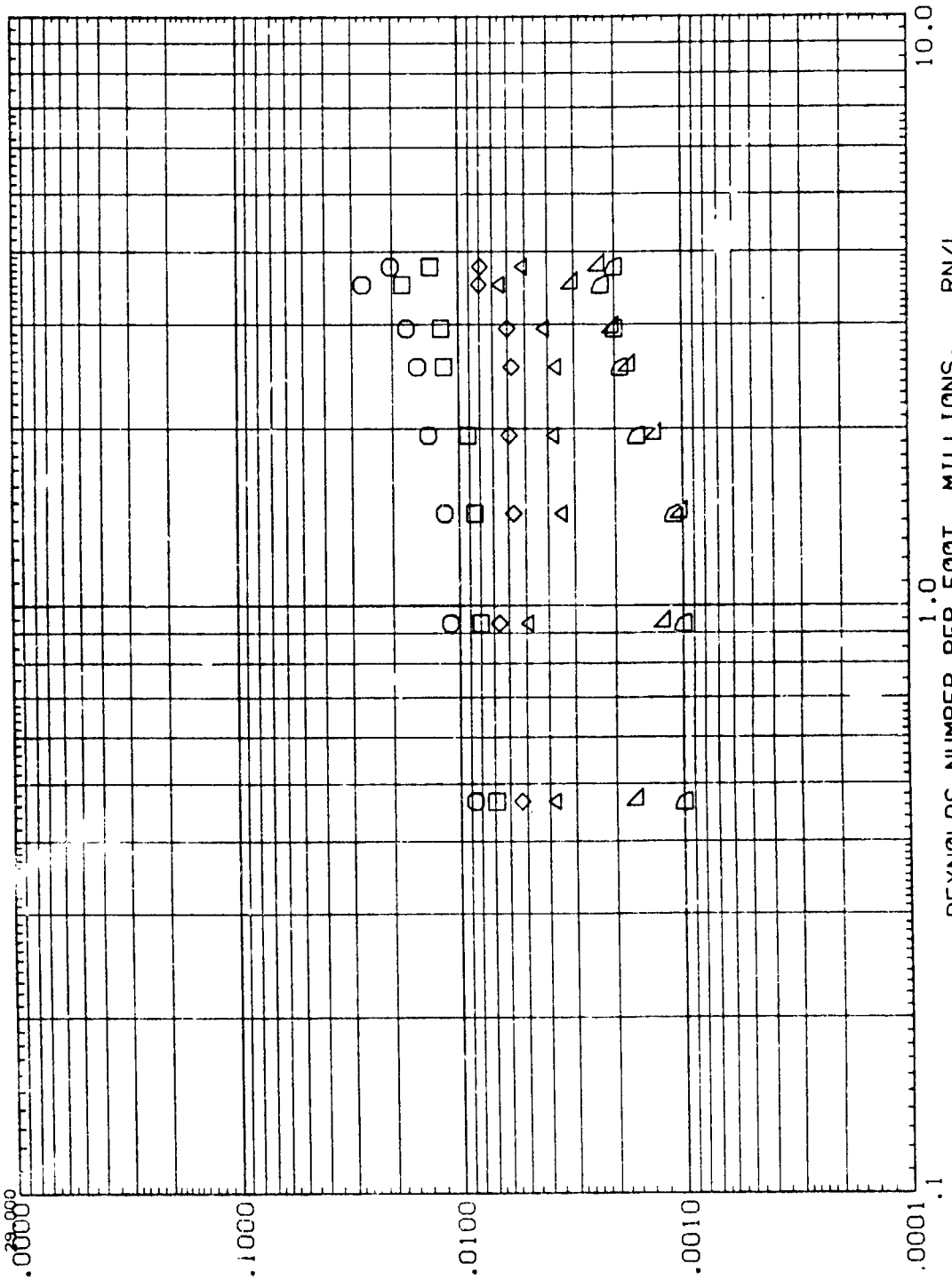


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S
 PAGE 141

REPRODUCIBILITY OF THE
ORIGINAL DATA

PARAMETRIC VALUES
MACH .000
RUDDER .000

BETA
ELEVON

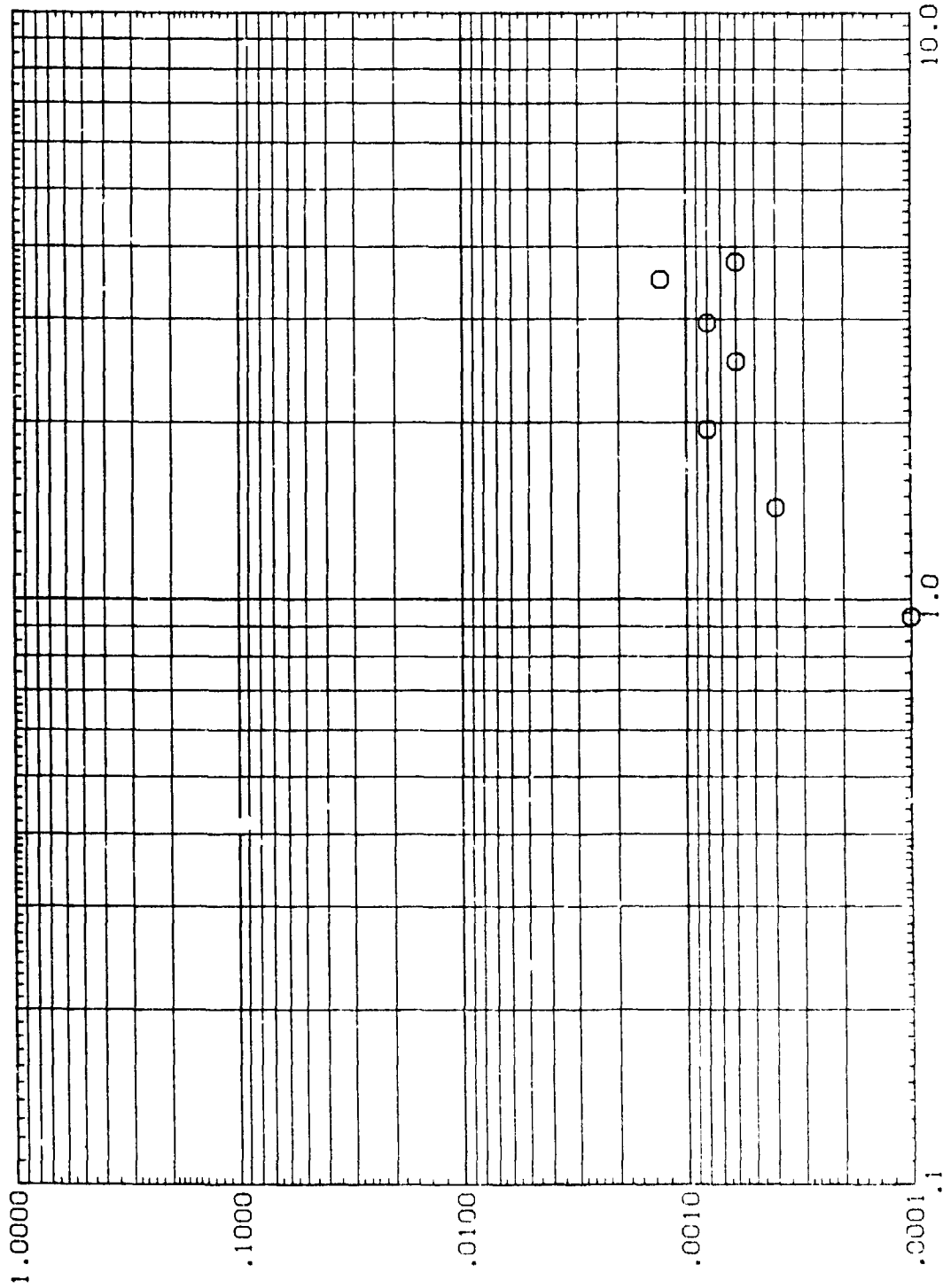
ALPHA
34.760

TRACE
2.000

NO
30.000

SYMBOL
O

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)



REYNOLDS NUMBER PER FOOT, MILLIONS. RN/L

FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

OH-74 (B8A) B62C12F10M16W127E52V8R19 (SVB0001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

SYMBOL T/C TRACE ALP
 18 000 2.000 39.790
 19 000 2.000 39.790
 20 000 2.000 39.790
 21 000 2.000 39.790
 22 000 2.000 39.790
 23 000 2.000 39.790

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

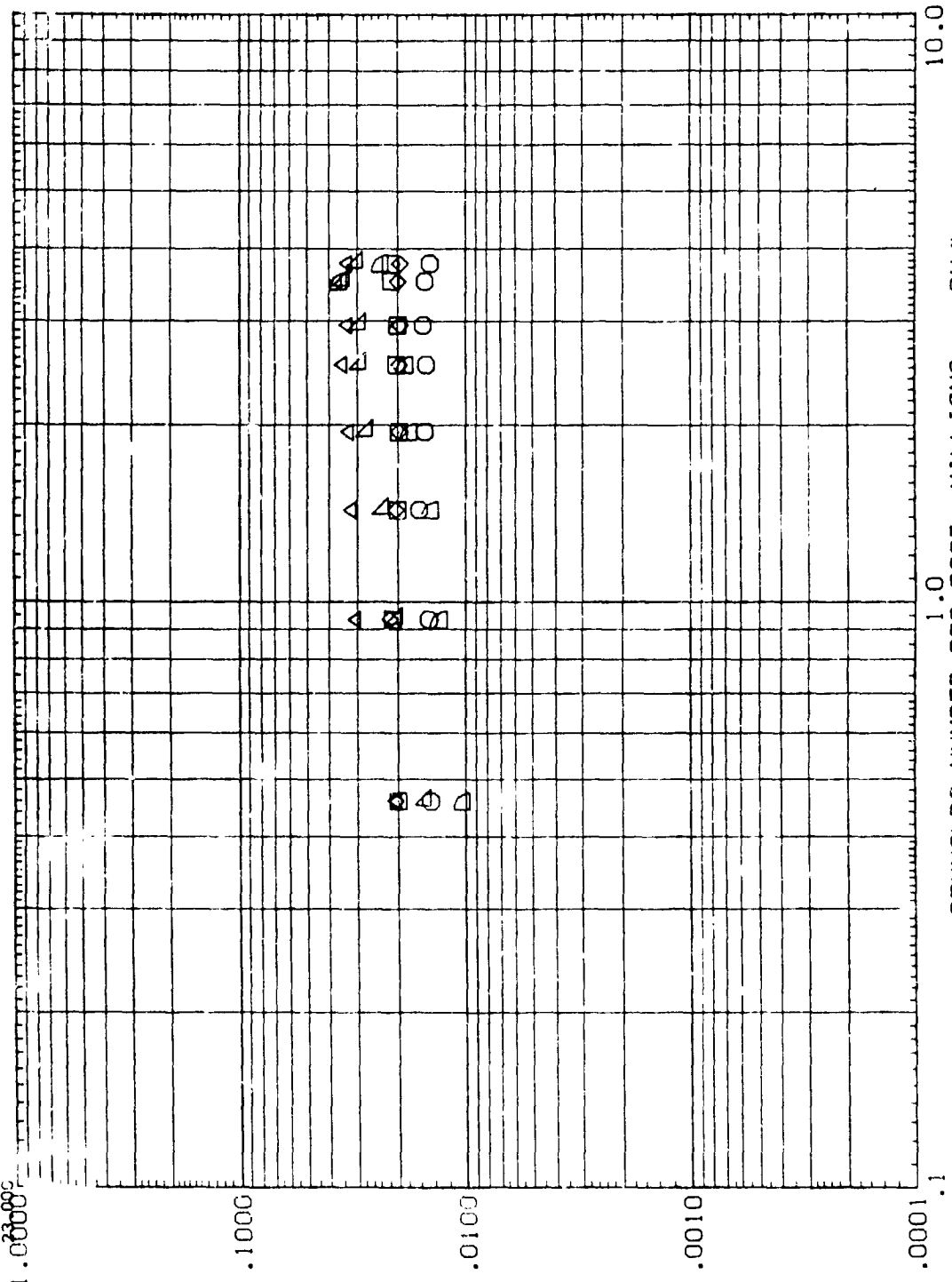


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
□	24.000	2.000	39.790	BETA	.000	MACH
◇	25.000			ELEVON	.000	RUDDER
△	26.000					
▽	27.000					
◊	28.000					
◊	29.000					

MEASURED TO THEQ. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/REF

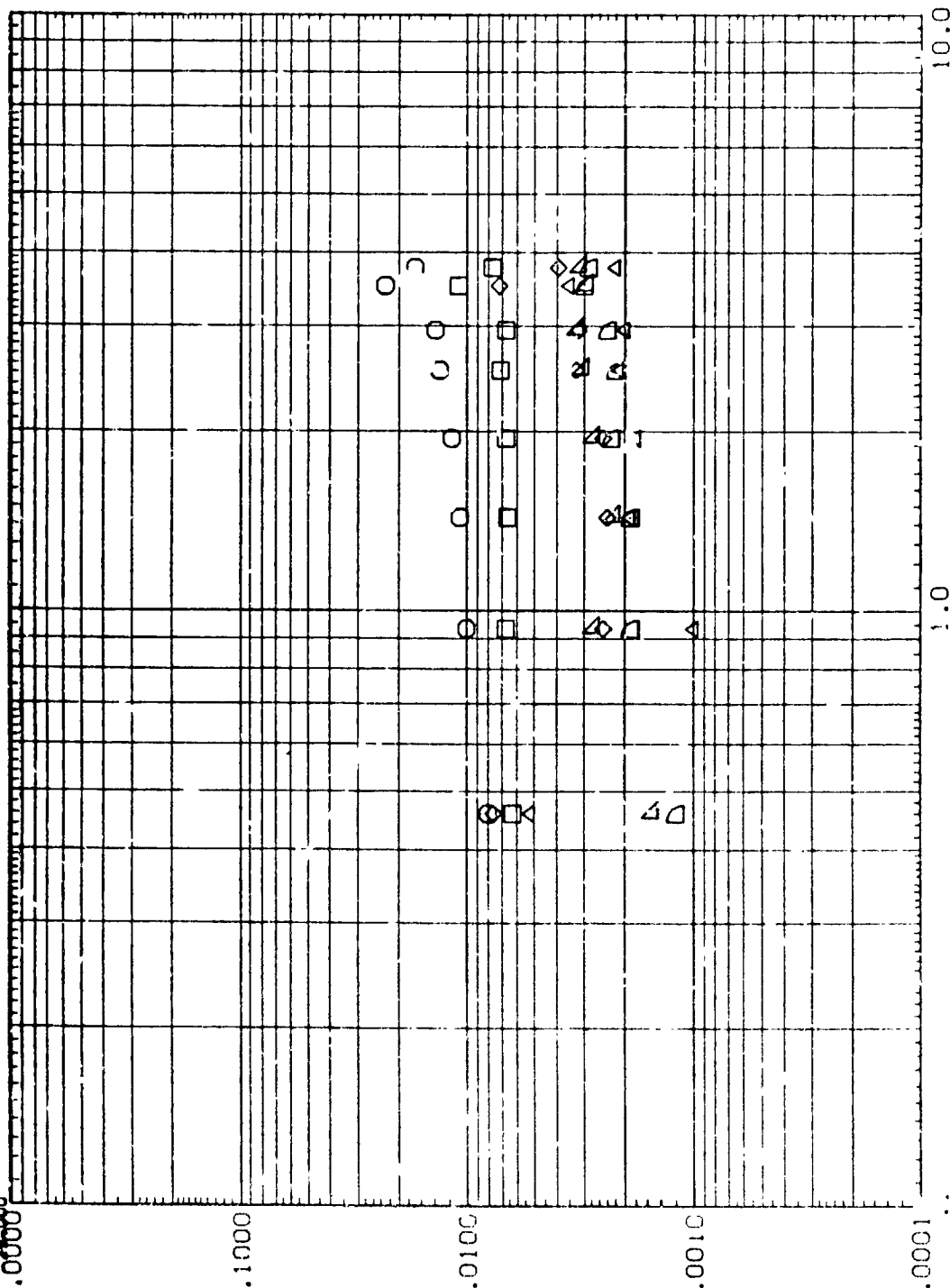


FIG. 25 REYNOLDS NUMBER PER FOOT, MILLIONS. RN/L FOR HINGE LINE TRACE T/C.S

OH-74 (AEDC V41B-B8A) B02C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
○	30.0	2.00	39.750	.000	.000	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

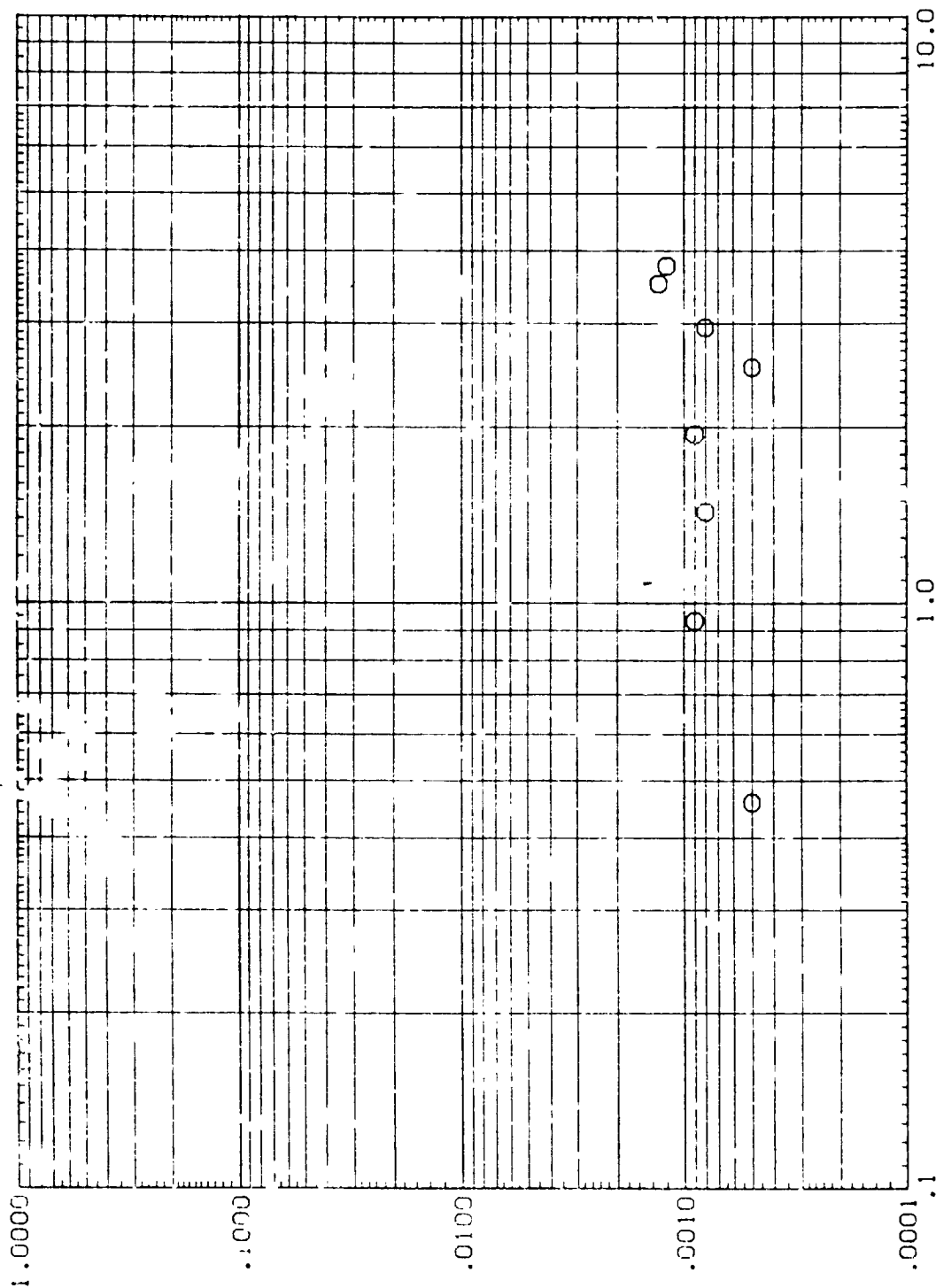


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

04-74 (AEDC V41B-B3A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 .000 MACH .000
 .000 RUDDER

TRACE ALPHA
 2.000 43.840

SYMBOL T/C NO
 18.000
 19.000
 20.000
 21.000
 22.000
 23.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

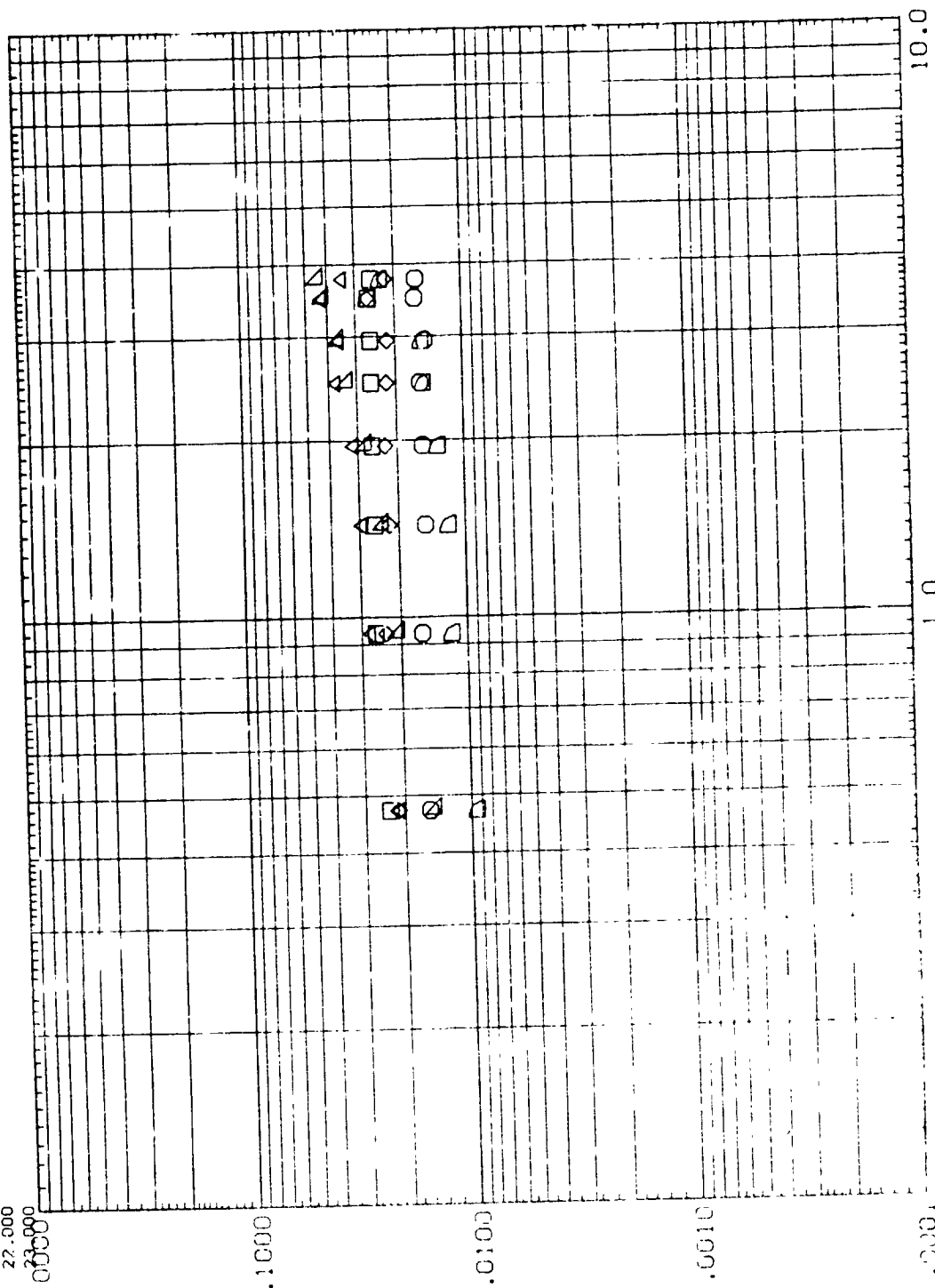


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

S Y M B O L	Q U A N T I T Y	U N I T	U N I T P R I C E	T O T A L
□	2	000		
□	2	000		
□	2	6,000		
△	2	7,000		
△	2	8,000		
△	2	9,000		

TRACE 1:1A
2.00C 13.840

PARAMETRIC VALUES	
BETA	.000
ELEVON	.000
MACH	.000
RUDDER	.000

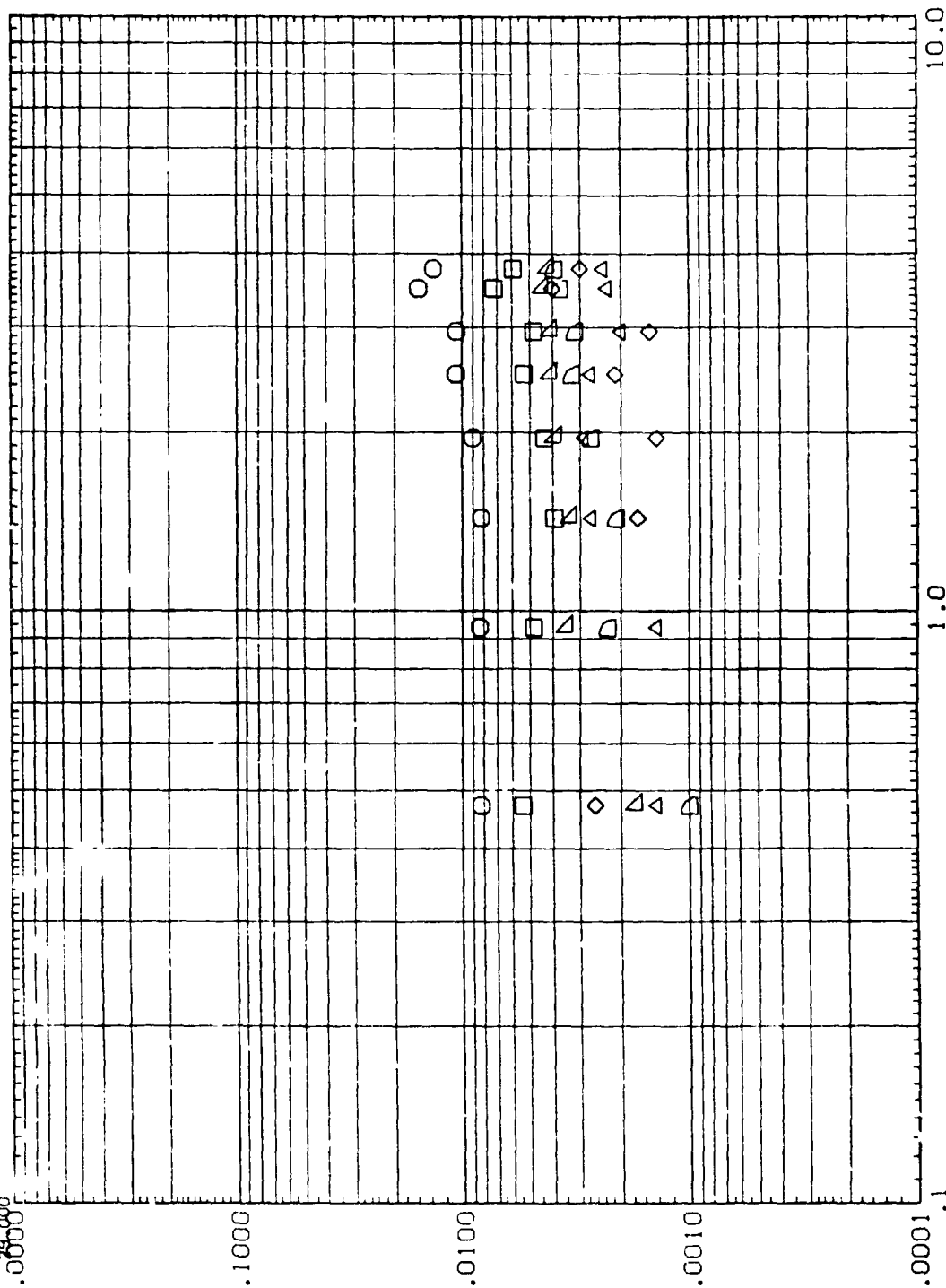


FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C.S

REPRODUCED FROM THE
ORIGINAL BY THE

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
○	30.000	2.000	43.840	BETA	MACH	8.000
				ELEVON	RUDDER	.000

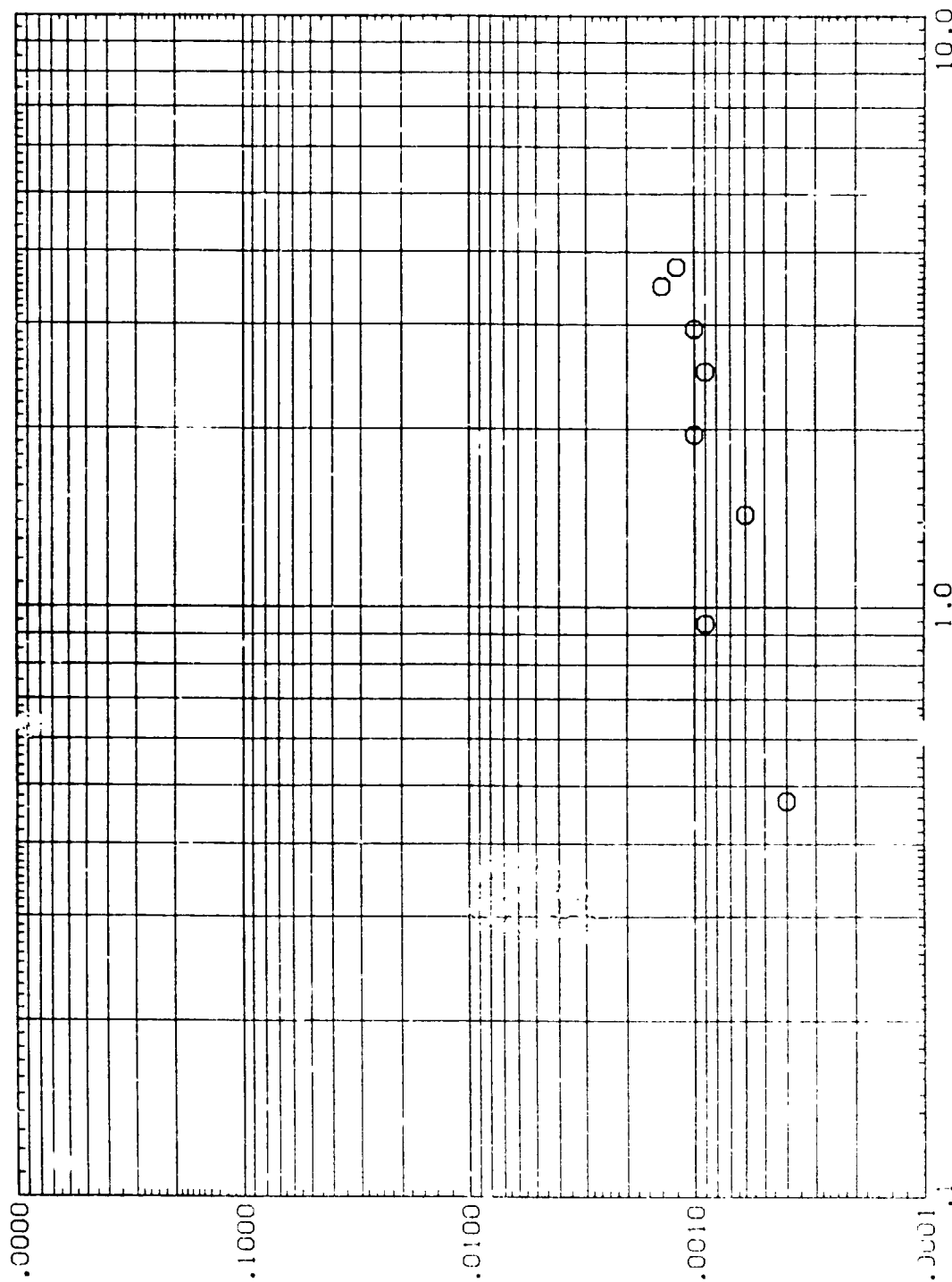


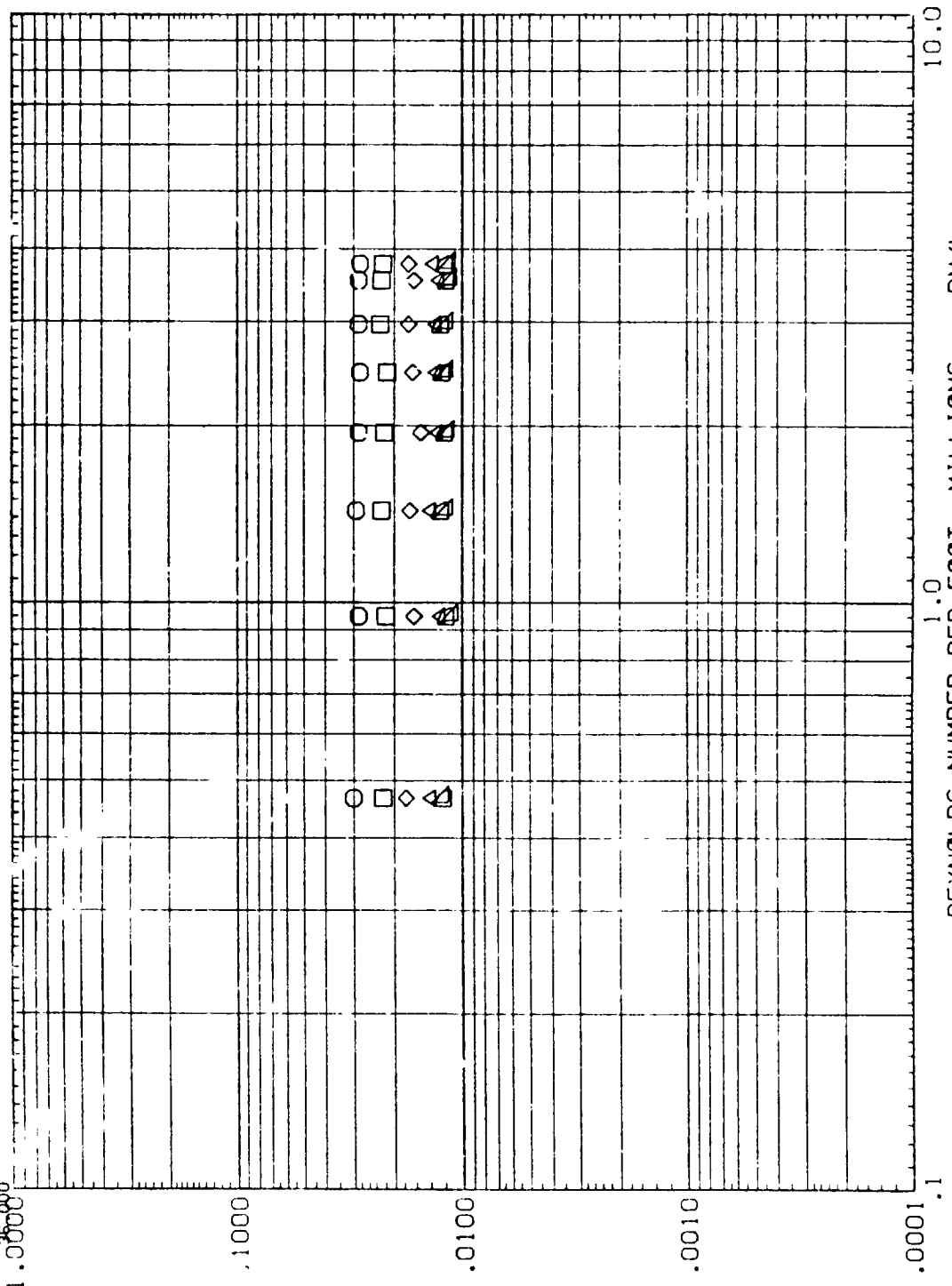
FIG. 25 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR HINGE LINE TRACE T/C,S

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

CH-74 (AEDC V413-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	.000
○	31.000	3.000	19.710	ELEVON	.000	RUDDER	.000
□	32.000						
◇	33.000						
△	34.000						
▽	35.000						
▽	36.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF



REYNOLDS NUMBER PER FOOT. MILLIONS. RN/L

FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	MACH	RUDDER	
							ELEVON
□	37.000	3.000	19.710	.000	8.000	.000	
□	38.000			.000			
◇	39.000						
◇	40.000						
◇	41.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

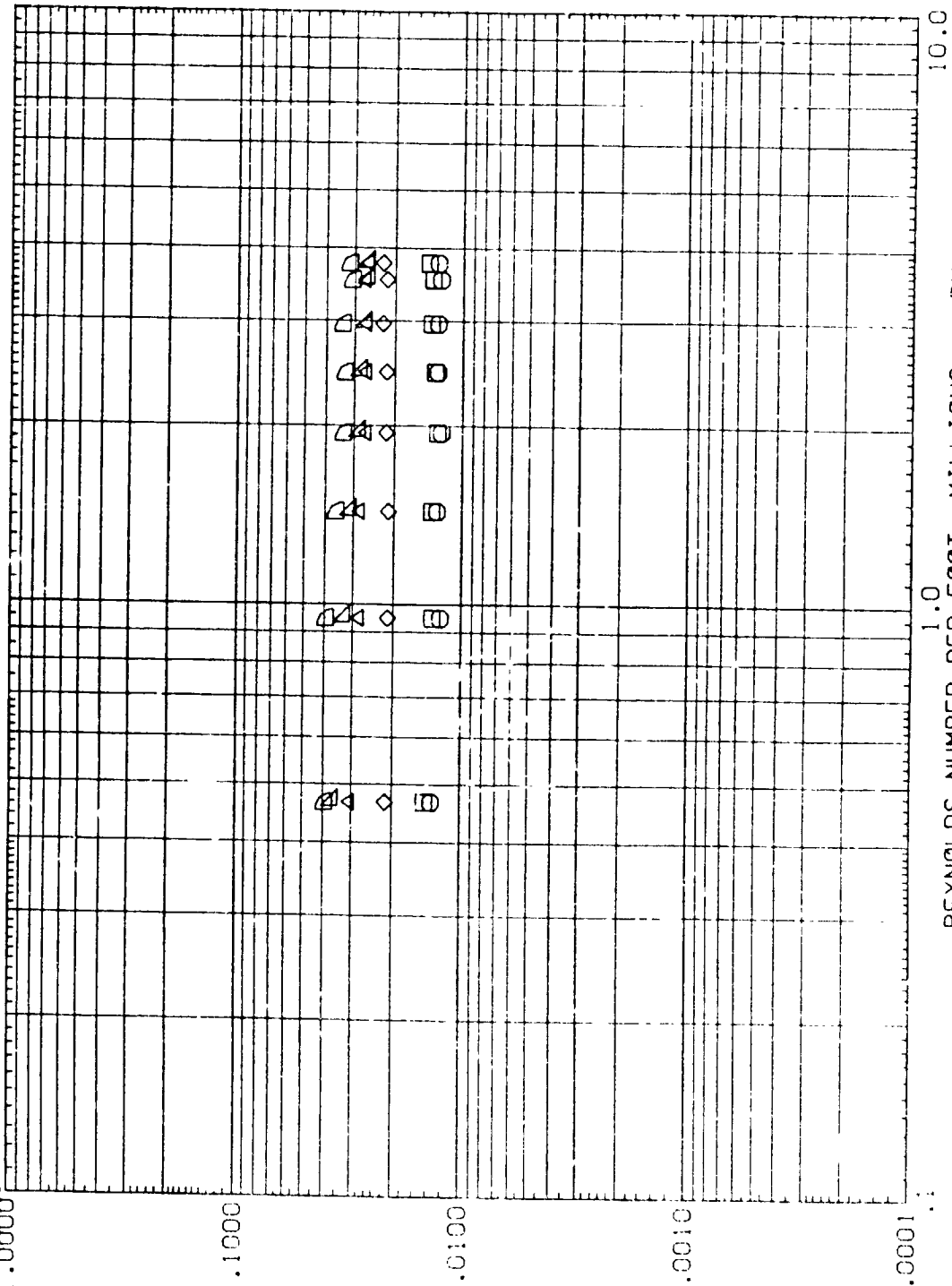


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S
 REYNOLDS NUMBER PER FOOT, MILLIONS. RN/L
 PAGE 150

OH-74 (AED V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C ID	TRACE	AL/D	PARAMETRIC VALUES		
				BETA ELEVON	.000 MACH	.000 RUDDER
□	43.0	3.000	19.710			
◇	44.0					
△	45.0					
○	46.0					
×	47.0					
+	48.0					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

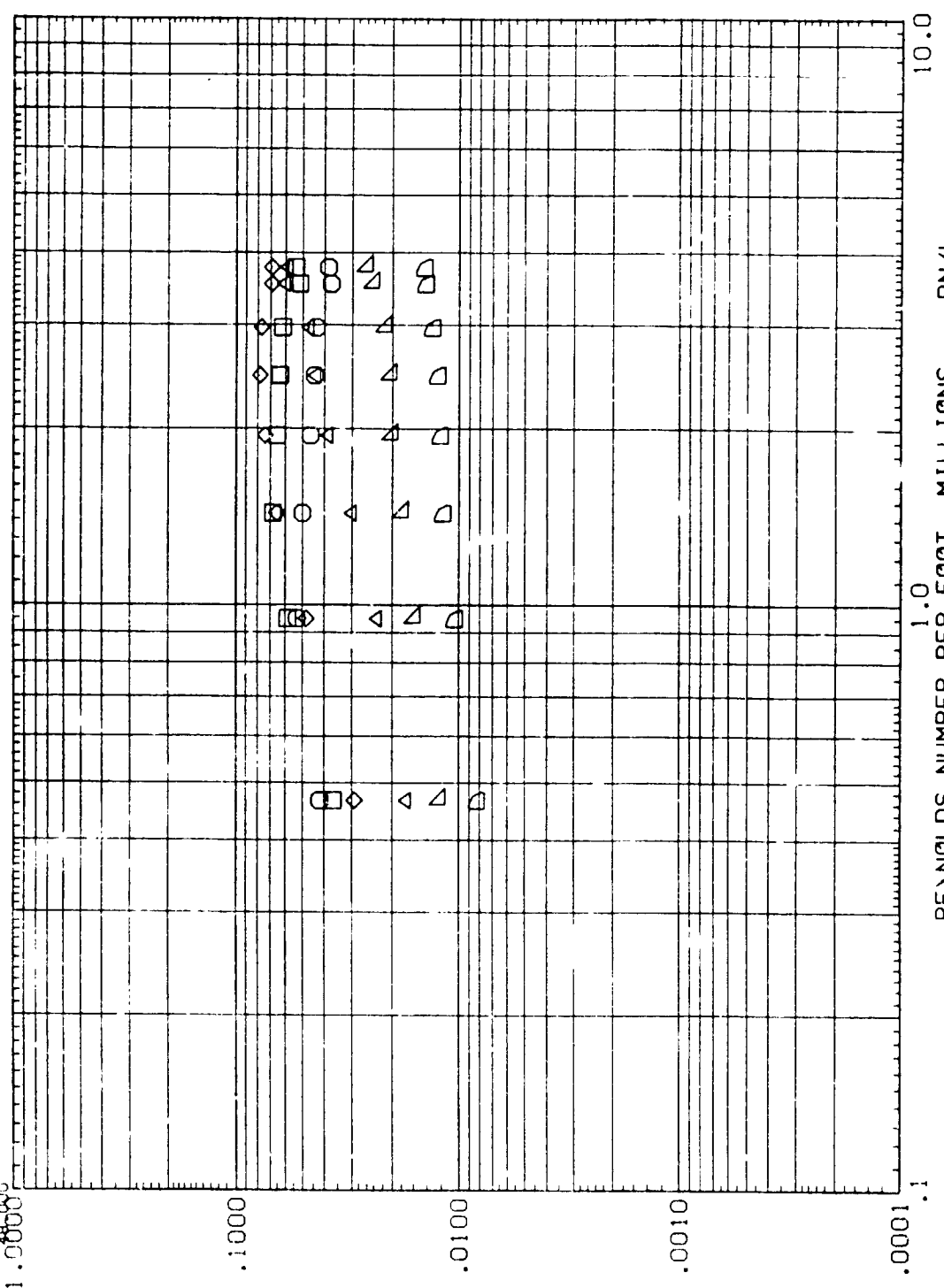


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

REPRODUCED FROM THE
ORIGINAL FILE

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
□	49.000	3.000	19.710	BETA	.000	MACH
◇	50.000			ELEVON	.000	RUDDER
▽	51.000					
△	52.000					
◇	53.000					
▽	54.000					

MEASURED TO IHQ. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

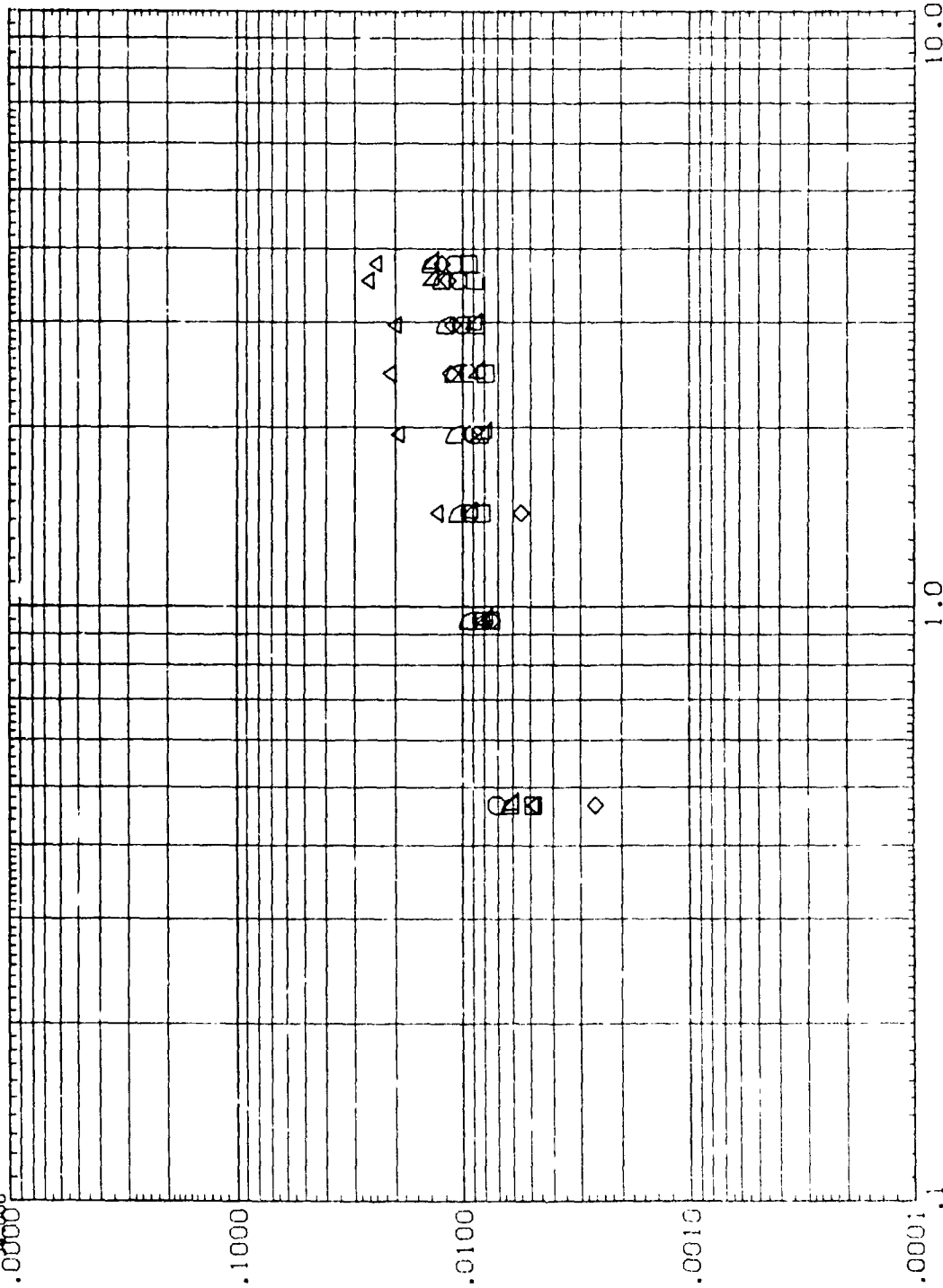


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

GH- (AEDC 4'-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL T/C NO E ALP
55.000 3.000 19.710

PARAMETRIC VALUES
BETA .000 MACH 8.003
ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

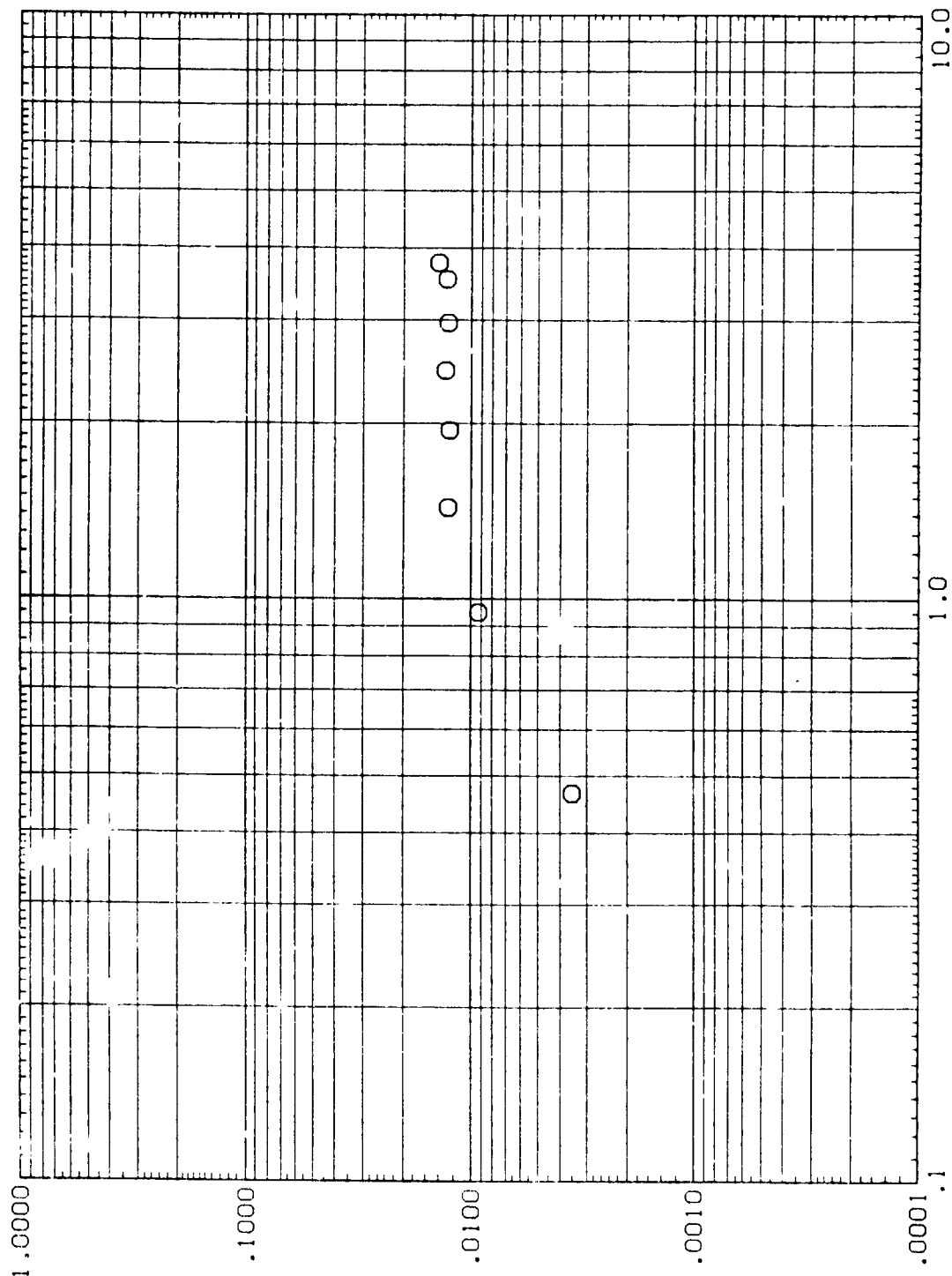
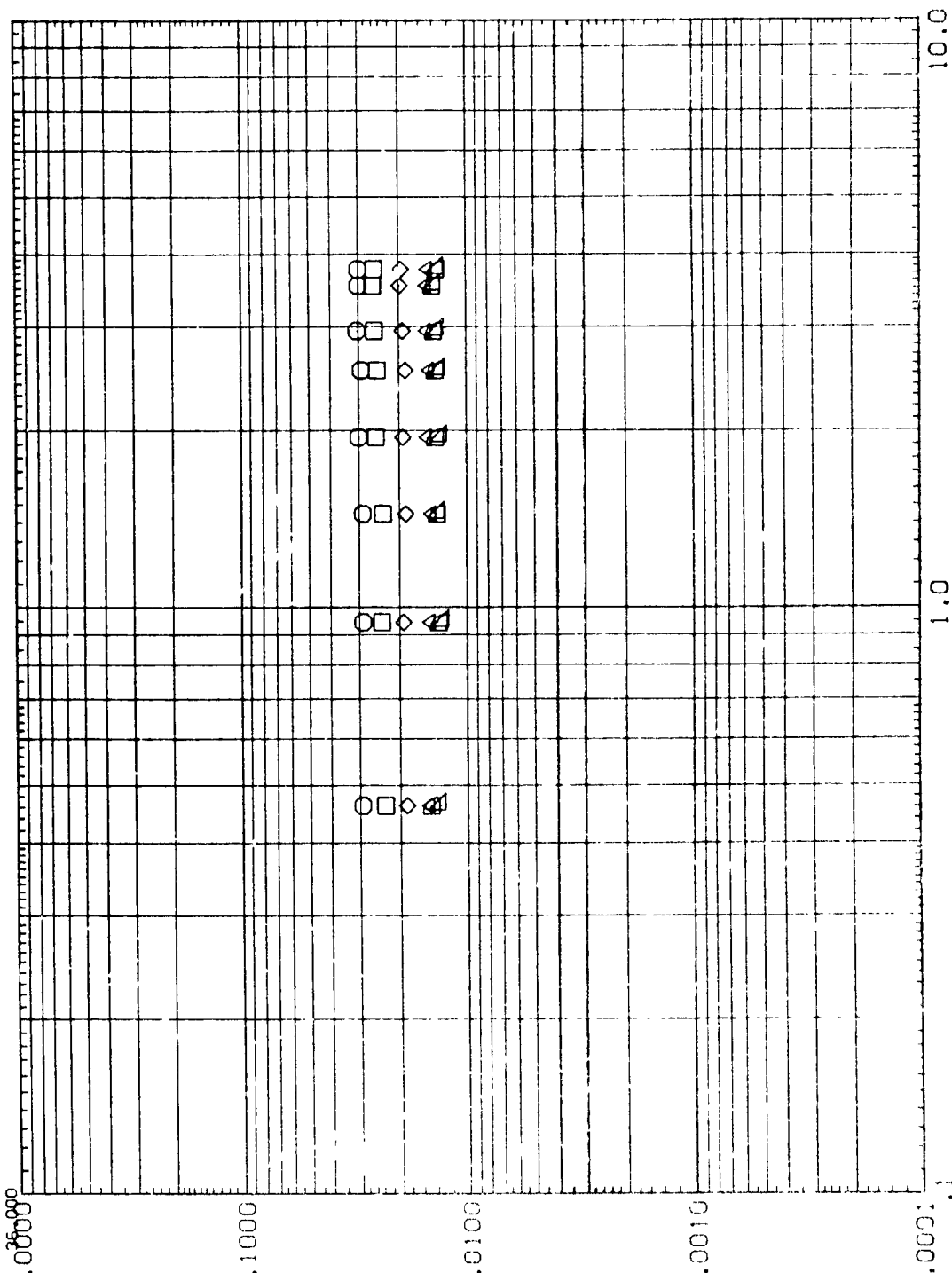


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
□	31.000	3.000	24.830	BETA	.000	MACH
◇	32.000			ELEVON	.000	RUDDER
◇	33.000					
◇	34.000					
◇	35.000					

MEASURED TO 1HL0. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF



REYNOLDS NUMBER PER FOOT, MILLIONS. RN/L

FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

311-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 .000 MACH .000
 BETA RUDDER .000
 ELEVON

TRACE ALPHA
 3 000 24.830

T/ 37.0
 38.0
 39.0
 40.0
 41.0

SYMBOL
 ▽
 ◇
 ◊
 □
 ○

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

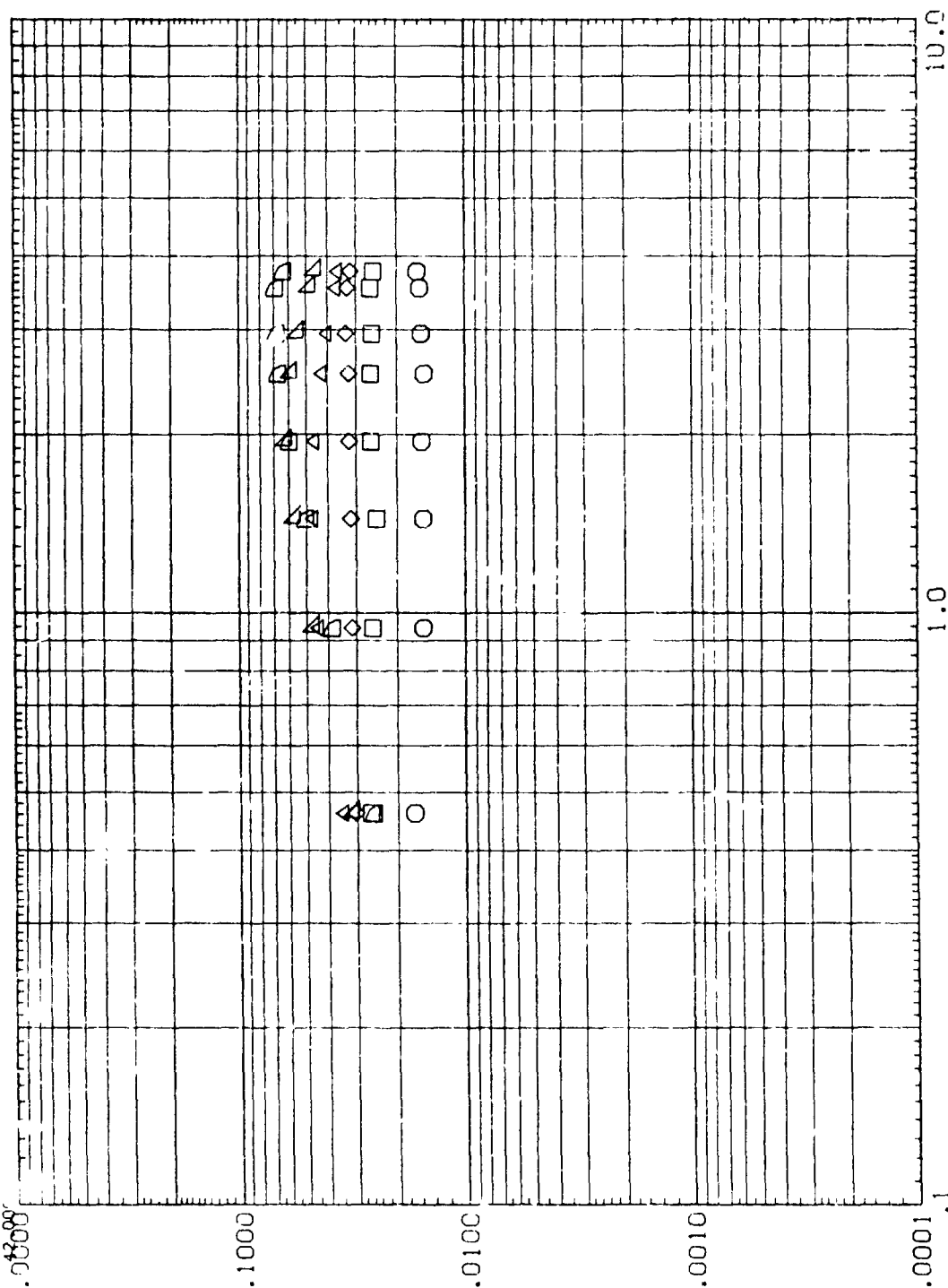


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

REPRODUCIBILITY OF THE
ORIGINAL PLOT IS POOR

OH-74 (AECC V41B-B8A) B62C12F10M16W127E52V8R19 (SY80001)

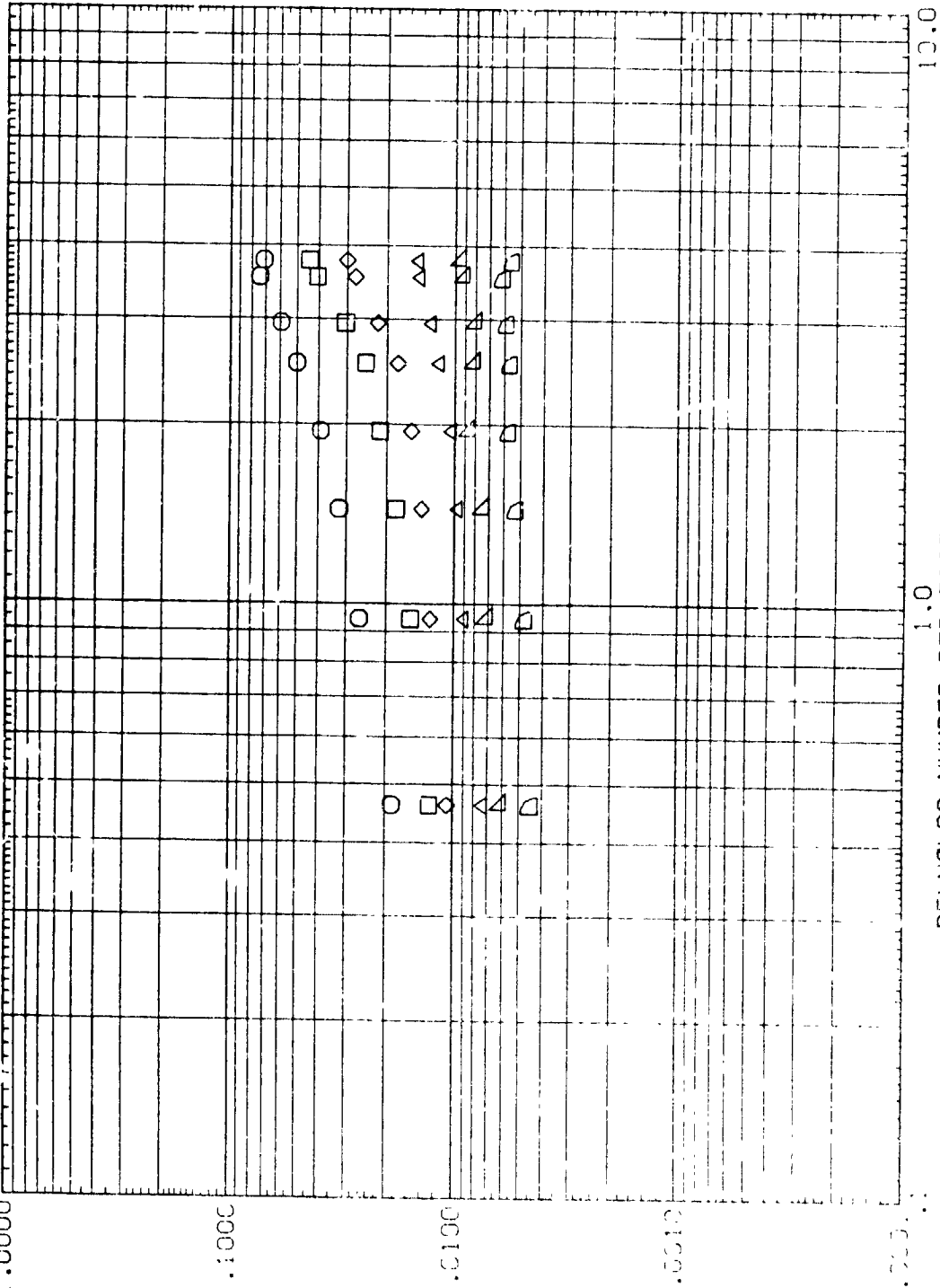
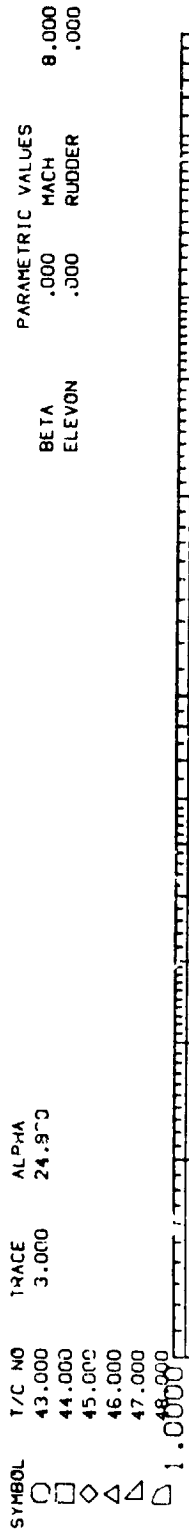


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

MEASURED TO THE HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

DATA FILE 1415-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
BETA .000 MACH .000
ELEVON .000 RUDDER .000

TRA 3.000 ALPHA 24.830

SYMBOL 1 49 50 51 52 53 54
1.0000 1.0000 1.0000 1.0000 1.0000 1.0000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/H₀

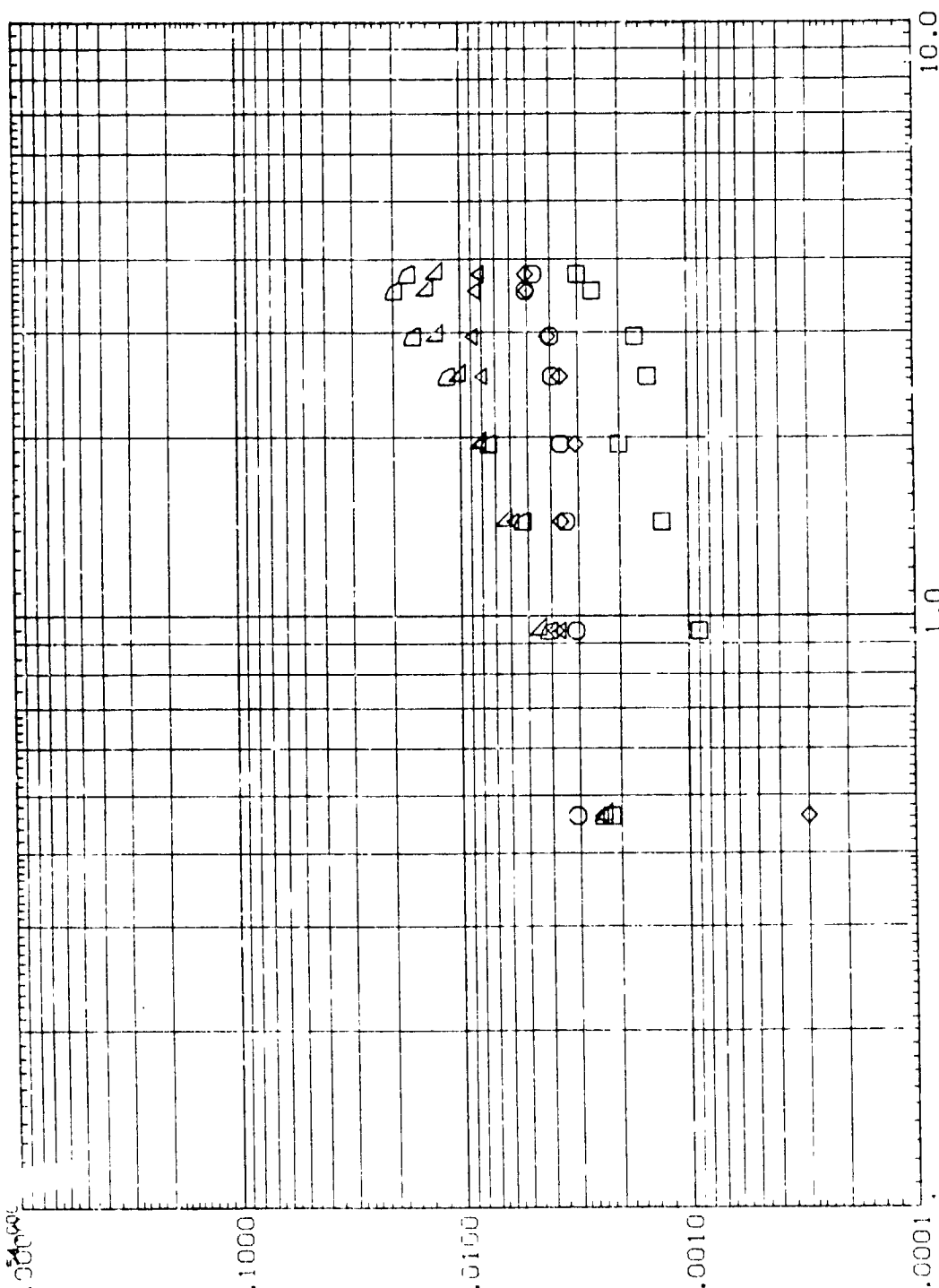


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE 1/3,S

04-74 (AEDC V41B-88A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
○	5.000	3.000	24.830	BETA	MACH	8.000
				ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

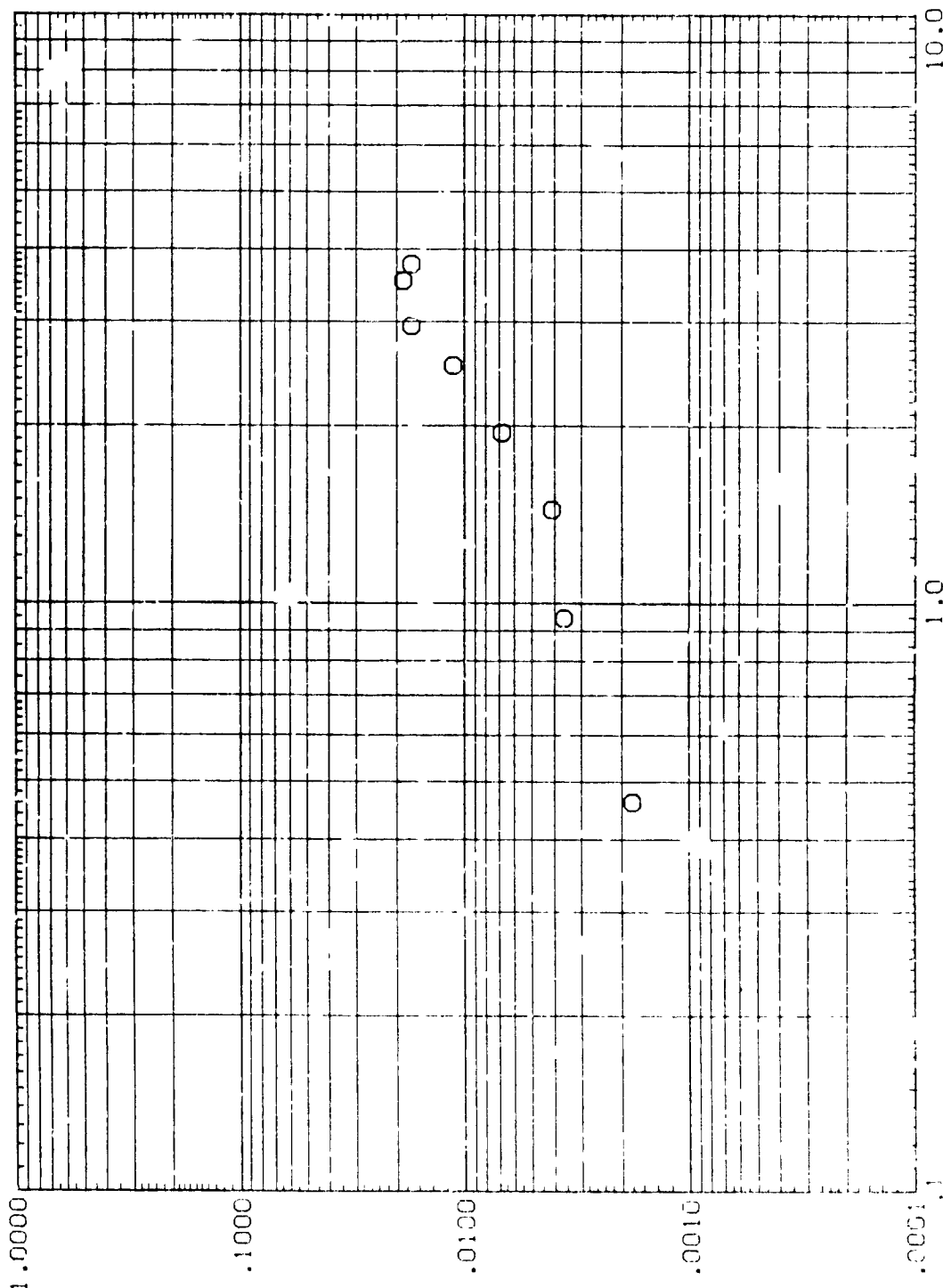


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

C-3

OH-24 (MEND V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 .0000 MACH
 .0000 RUDDER

BETA
 ELEVON

TRACE
 3.000
 ALPHA
 29.770

T/C N
 31.0-J
 32.000
 33.000
 34.000
 35.000

180L
 C
 D
 E
 F
 G
 H
 I
 J
 K
 L
 M
 N
 O
 P
 Q
 R
 S
 T
 U
 V
 W
 X
 Y
 Z

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

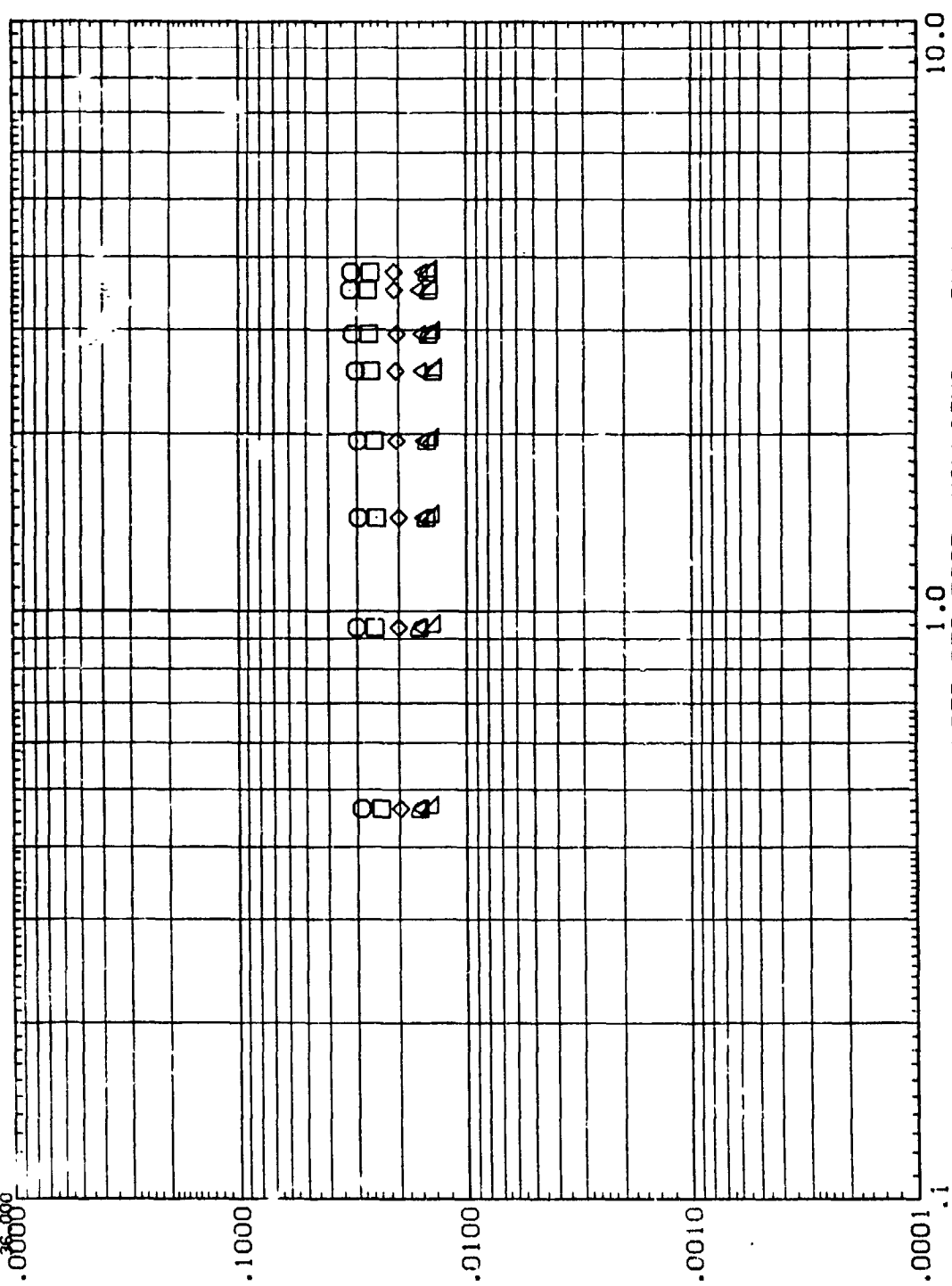


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

0H-74 (AEDC V41B-98A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	PARAMETRIC VALUES
○	37.000	3.000	29.770	ELEVON	000
◇	38.000			MACH	.000
▽	39.000			RUDDER	.000
▽	40.000				
▽	41.000				
▽	42.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

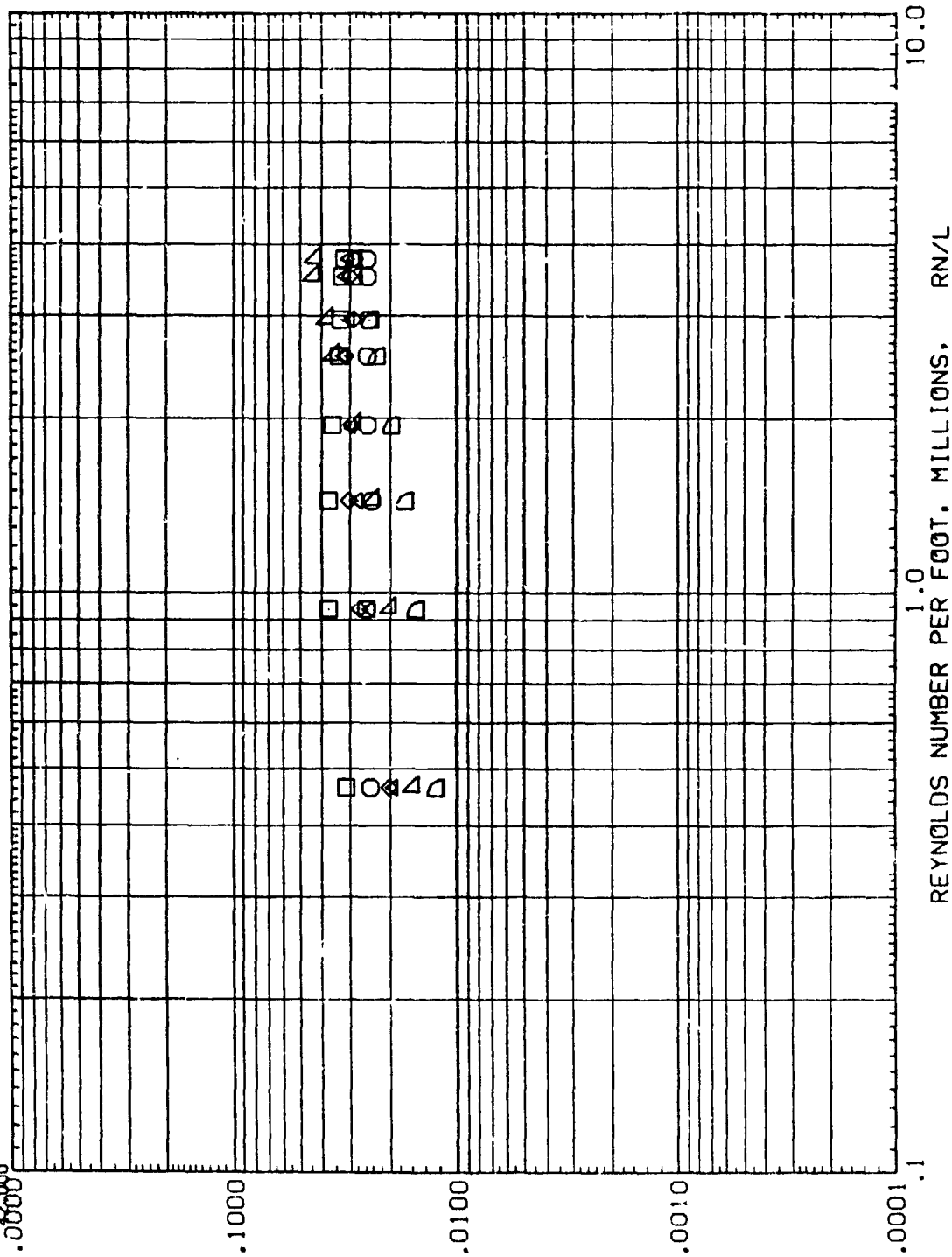


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

PH-7 (V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	8.000
	43.000	3.000	29.770	ELEVON	.000	RUDDER	.000
	44.000						
	45.000						
	46.000						
	47.000						
	48.000						

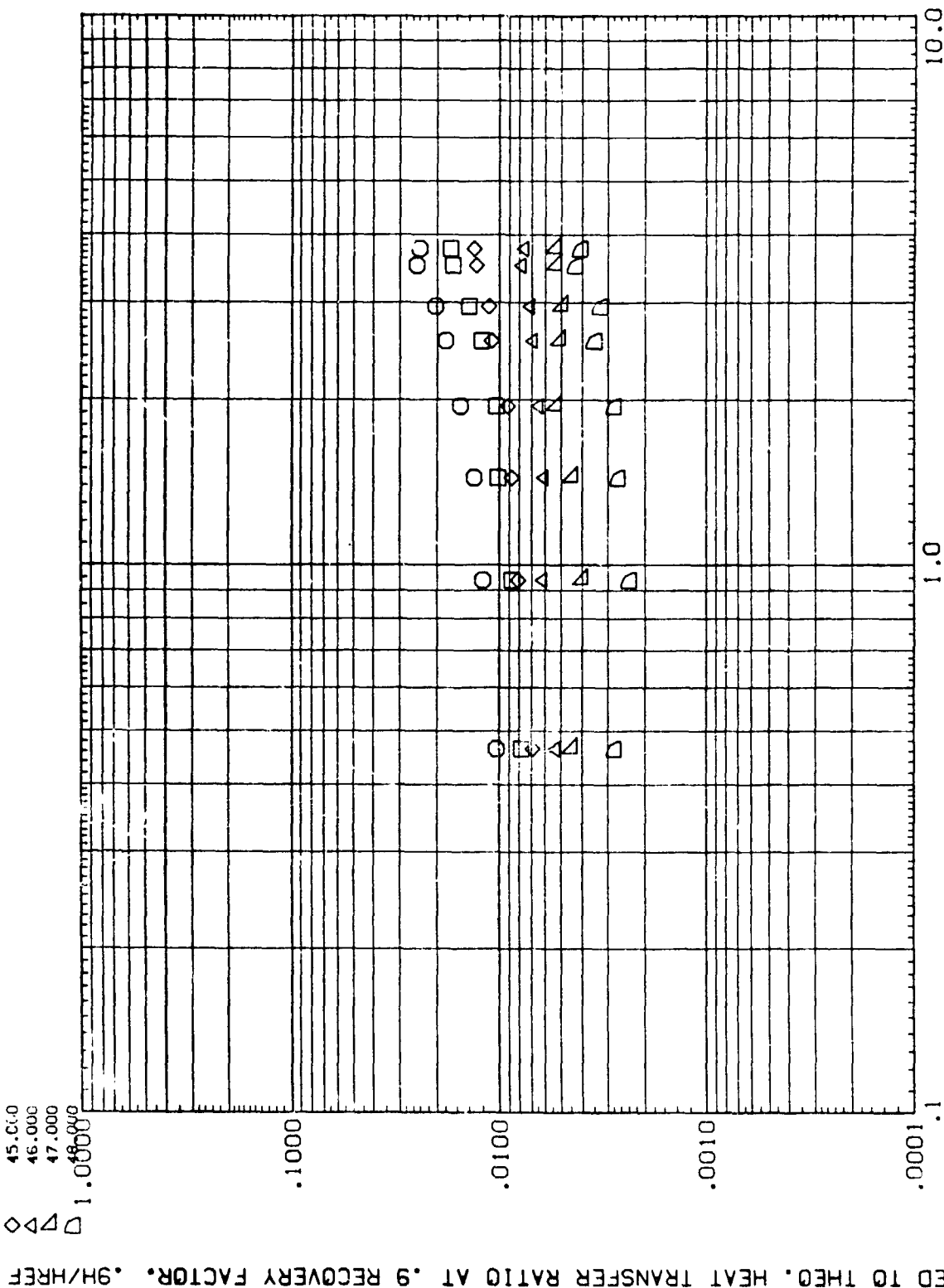


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
□	49.000	3.000	29.770	BETA	.000	MACH
◇	50.000			ELEVON	.000	RUDDER
◇	51.000					
◇	52.000					
◇	53.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

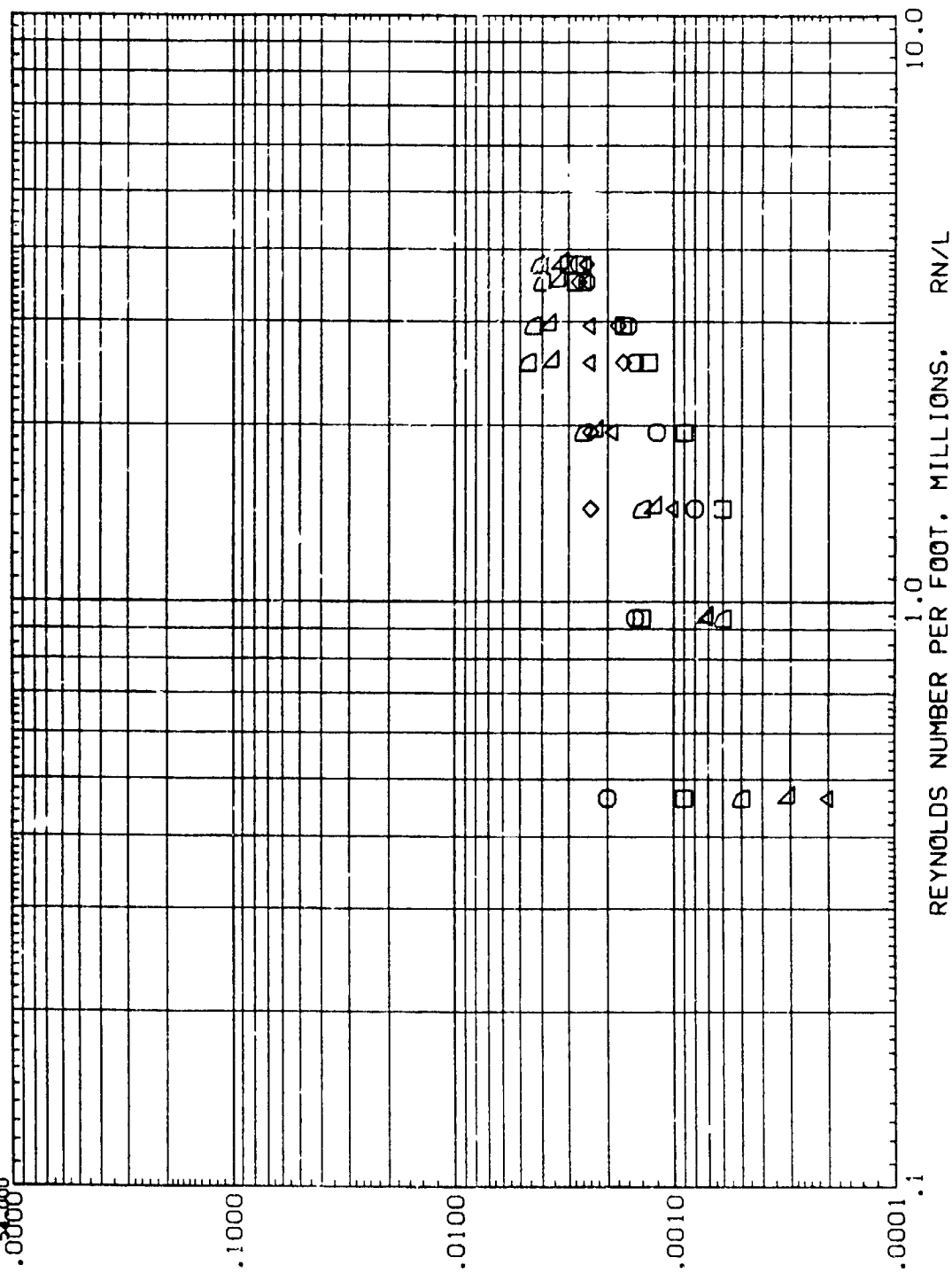


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

REPRODUCIBILITY OF THE
ORIGINAL PLOTS IS POOR

9H-7 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL O	T/C NO 55.30	TRACE 3.000	ALPHA 29.770	PARAMETRIC VALUES		
				BETA ELEVON	.000 MACH	.000 RUDDER

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

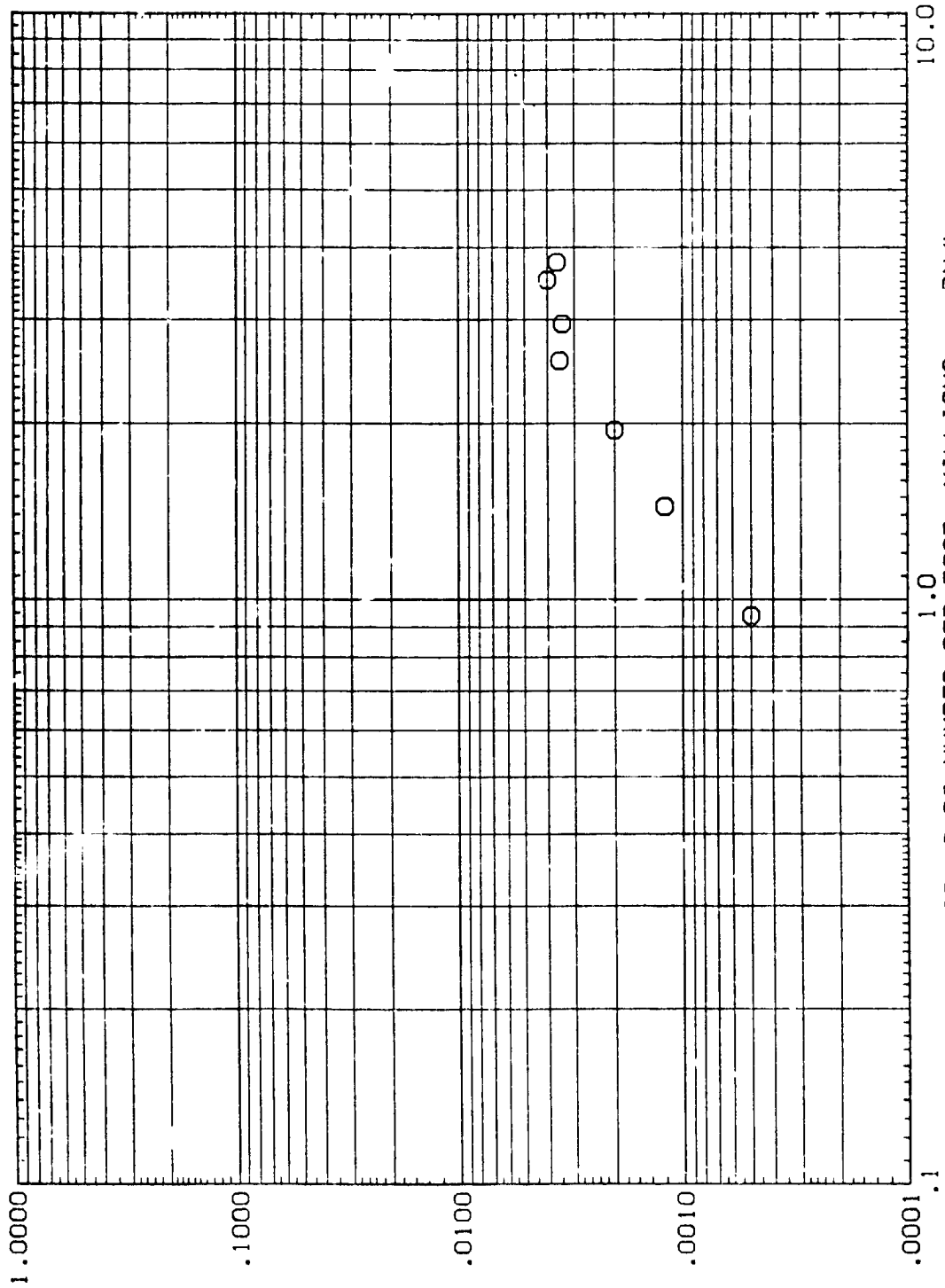


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
□	31.000	3.000	34.760	BETA	.000	MACH
◇	32.000			ELEVON	.000	RUDDER
△	33.000					
▽	34.000					
◇	35.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

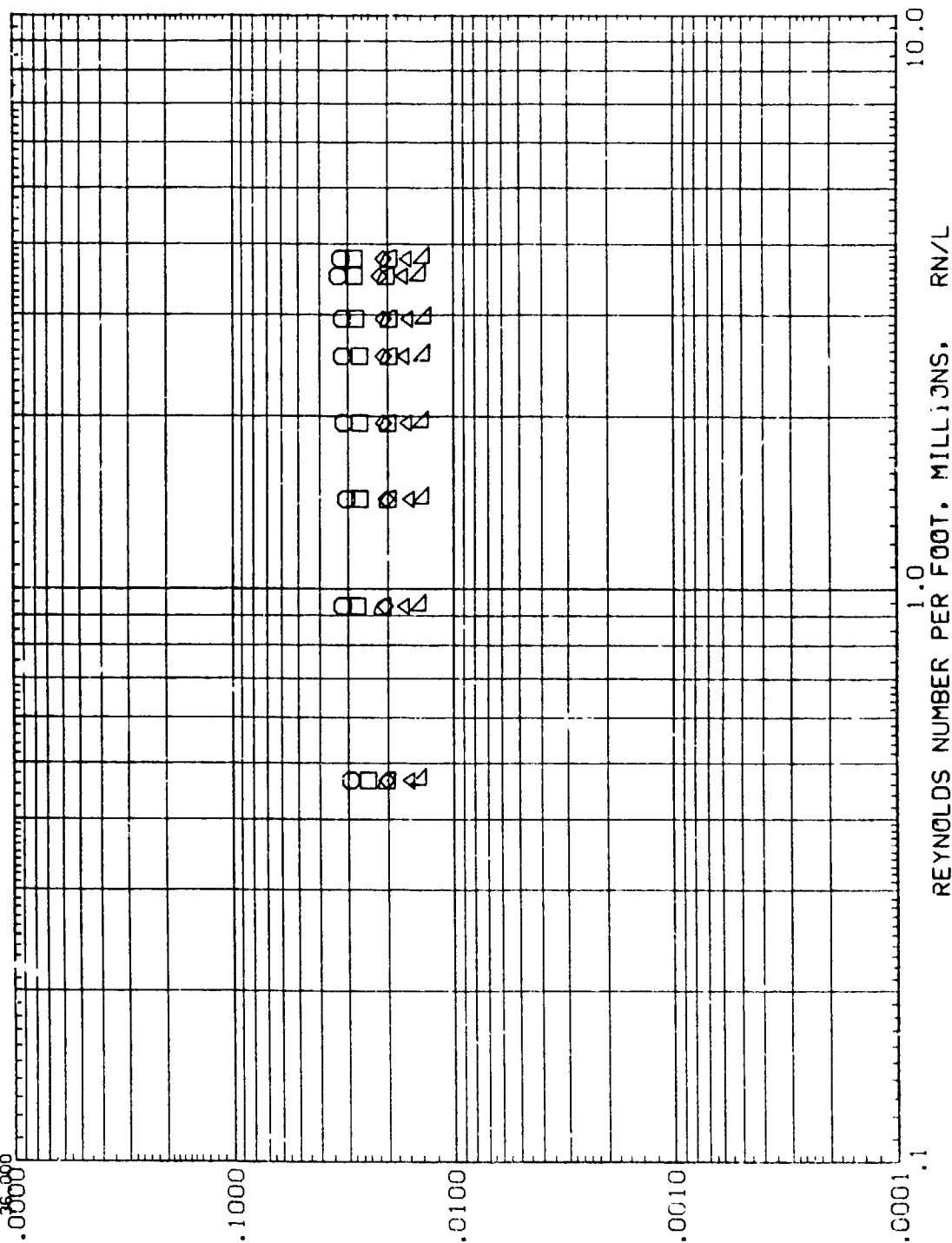


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

11

104-71 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	8.000
□	37	3.000	34.760	ELEVON	RUDDER	.000
◇	38					
◇	39					
◇	40					
◇	41					
◇	42					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HR T

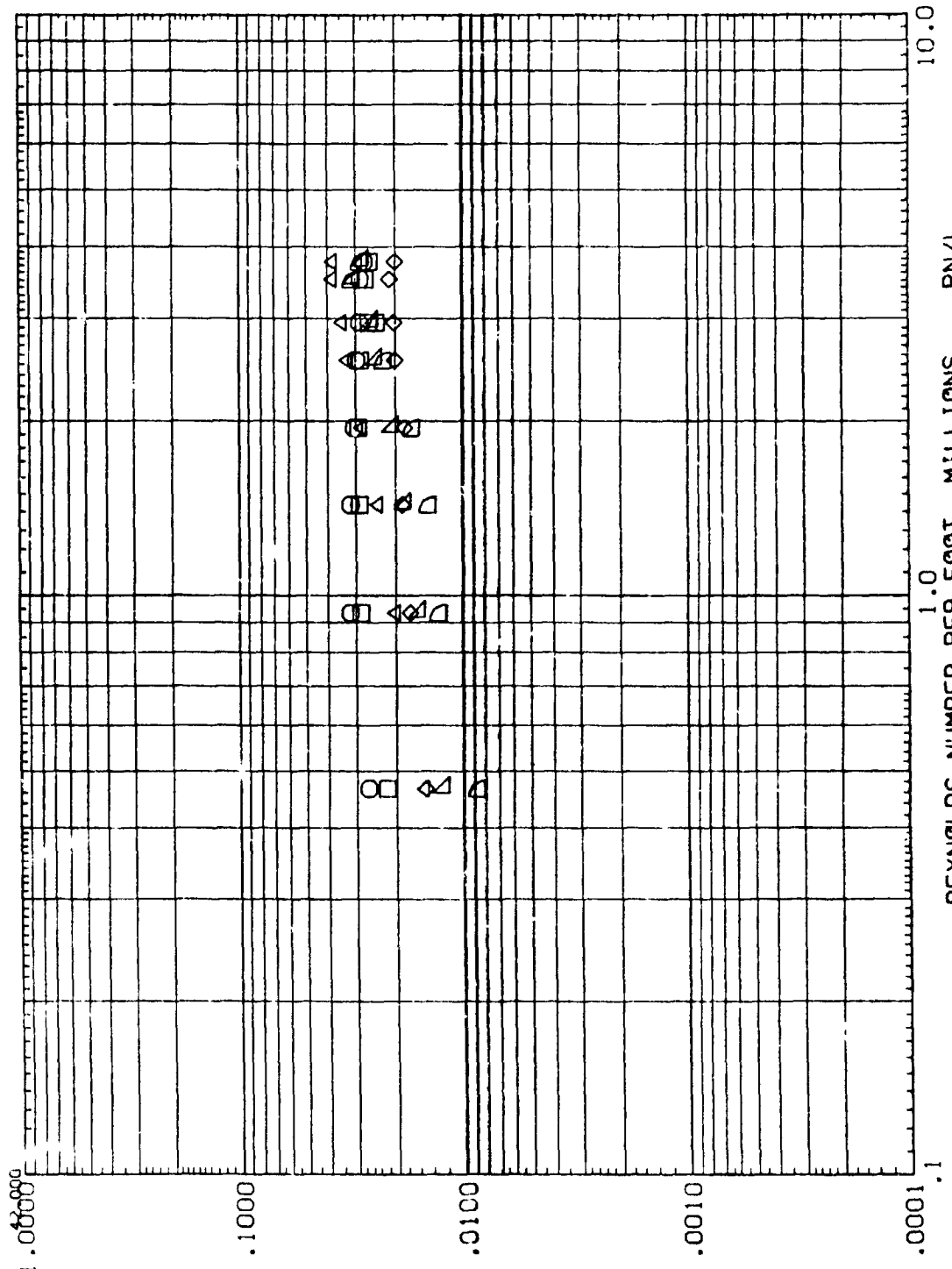


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	.000
○	43.000	3.000	34.760	ELEVON	.000	RUDDER	.000
◇	44.000						
□	45.000						
▽	46.000						
△	47.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

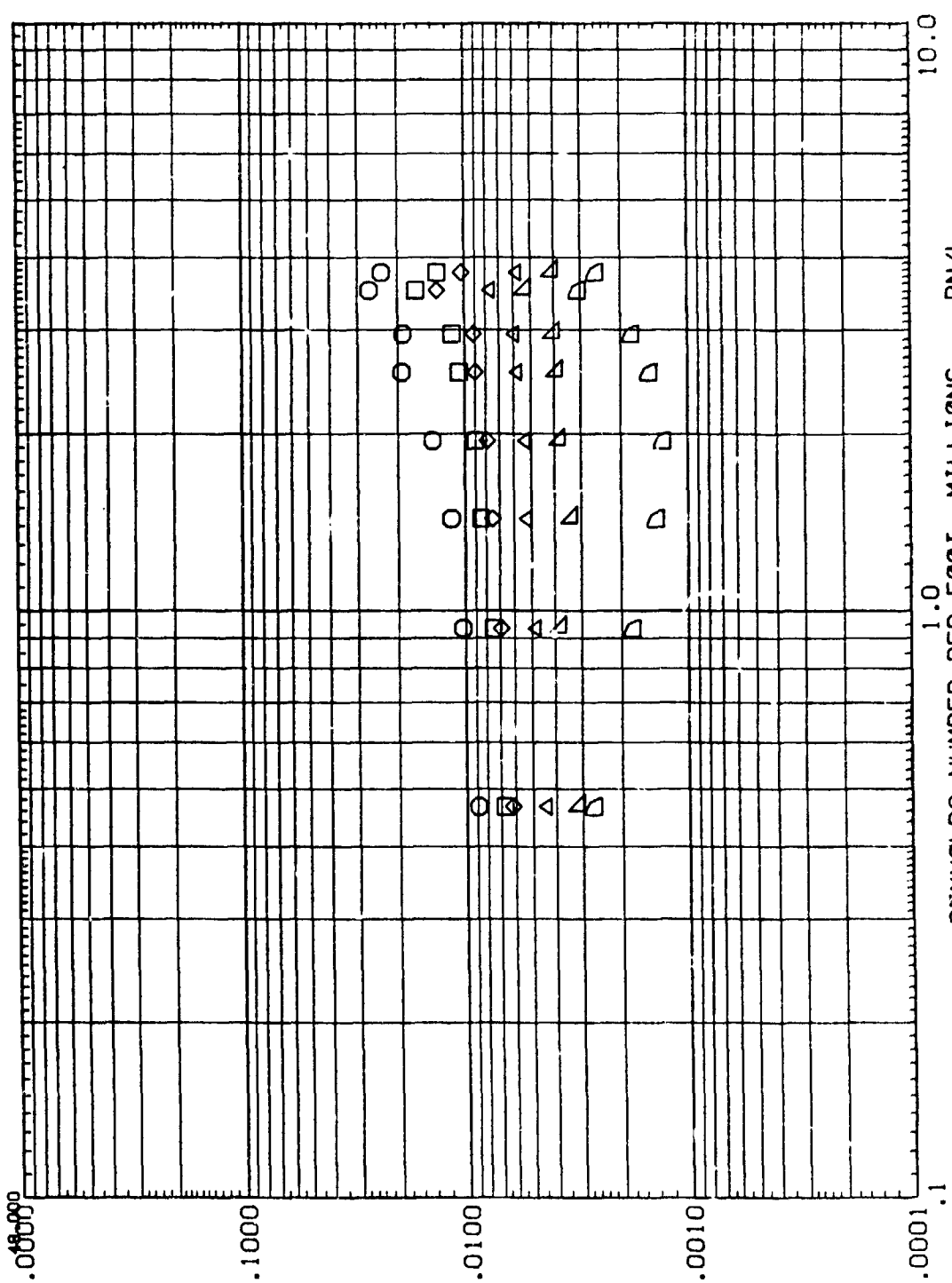


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

OH-74 (AEDC V41B-P3A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
BETA .000 MACH 8.000
ELEVON .000 RUDDER .000

T/C 40 TRA 3.000 A 34.760
49.000
50.000
51.000
52.000
53.000

SYNTHOL
□ ◇ △ ▽ ▿

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

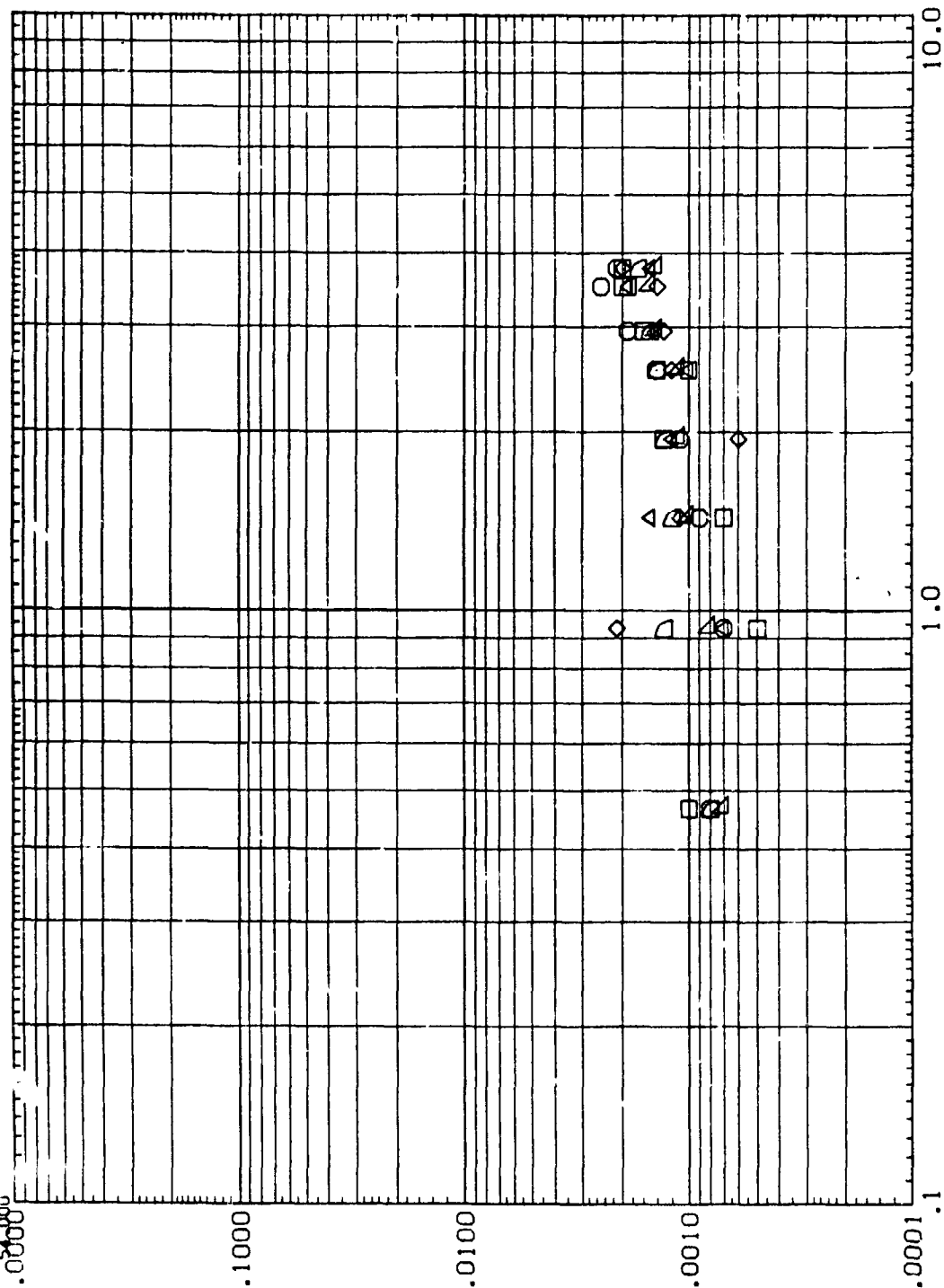


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
O	55.00	3.000	34.760	.000	.000	.000

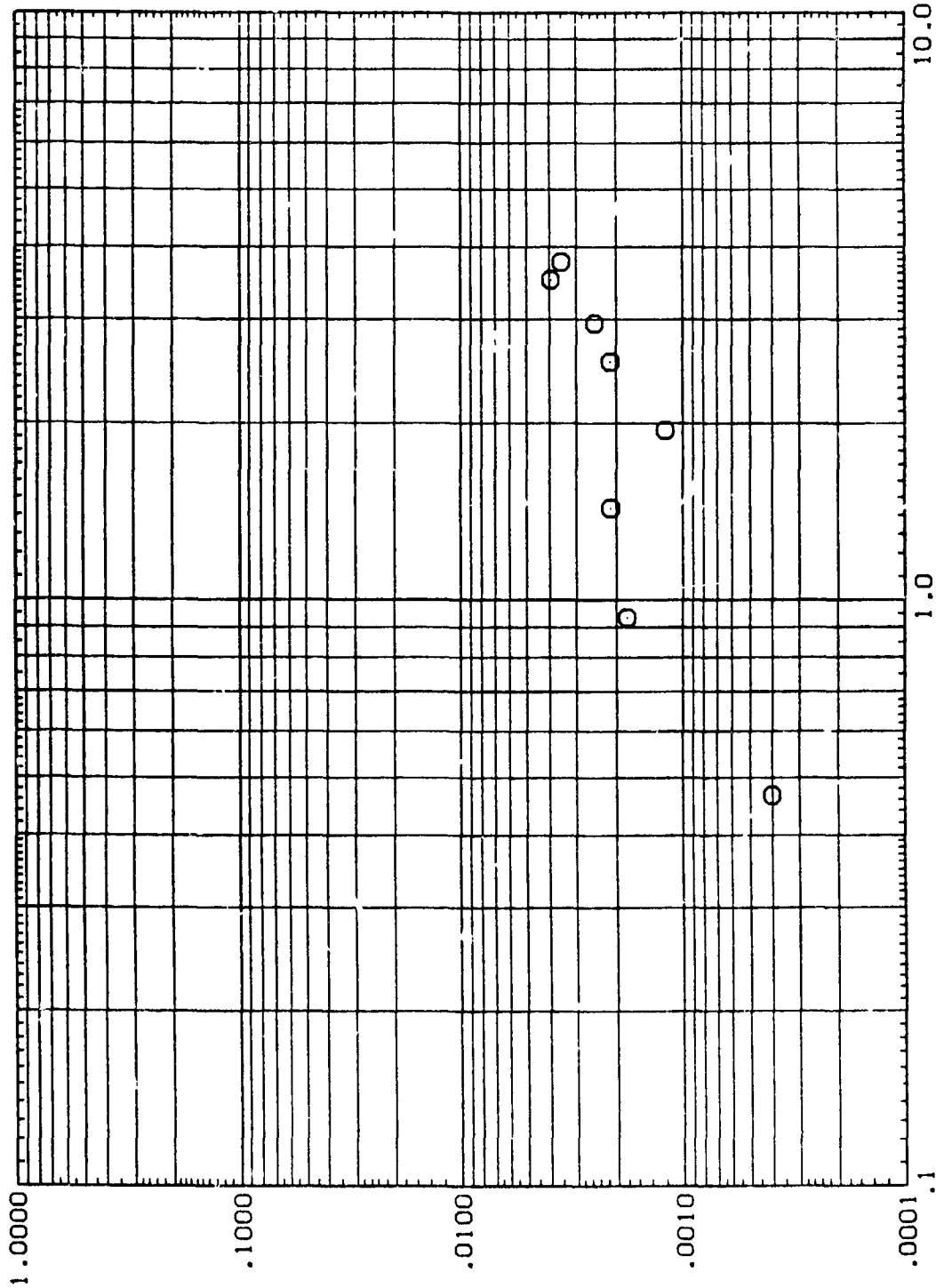


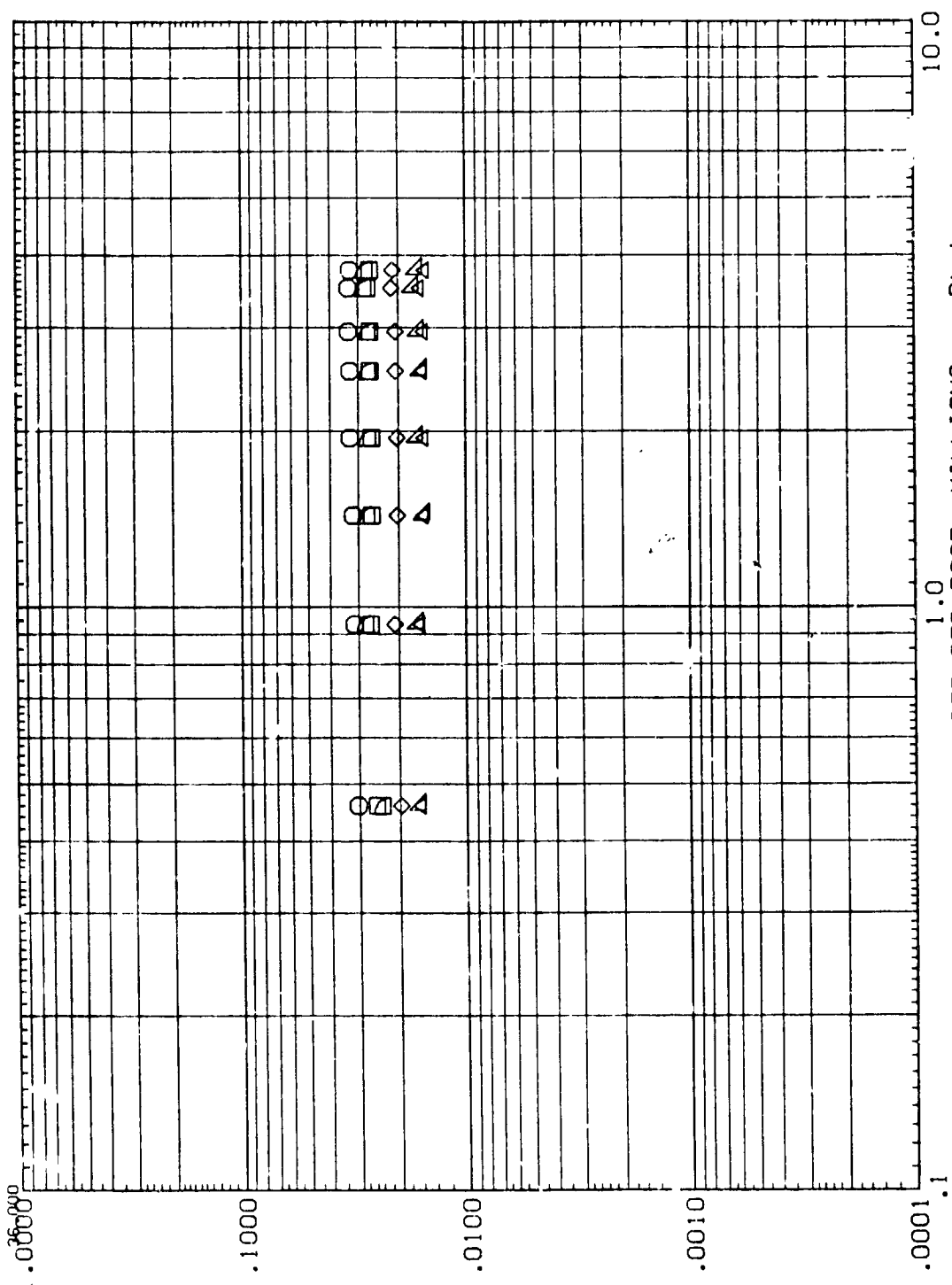
FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

OH-74 (AEDC V41B-B8A) R62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C R/O	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	8.000
	31.000	3.000	39.790	ELEVON	.000	RUDDER	.000
	32.000						
	33.000						
	34.000						
	35.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF



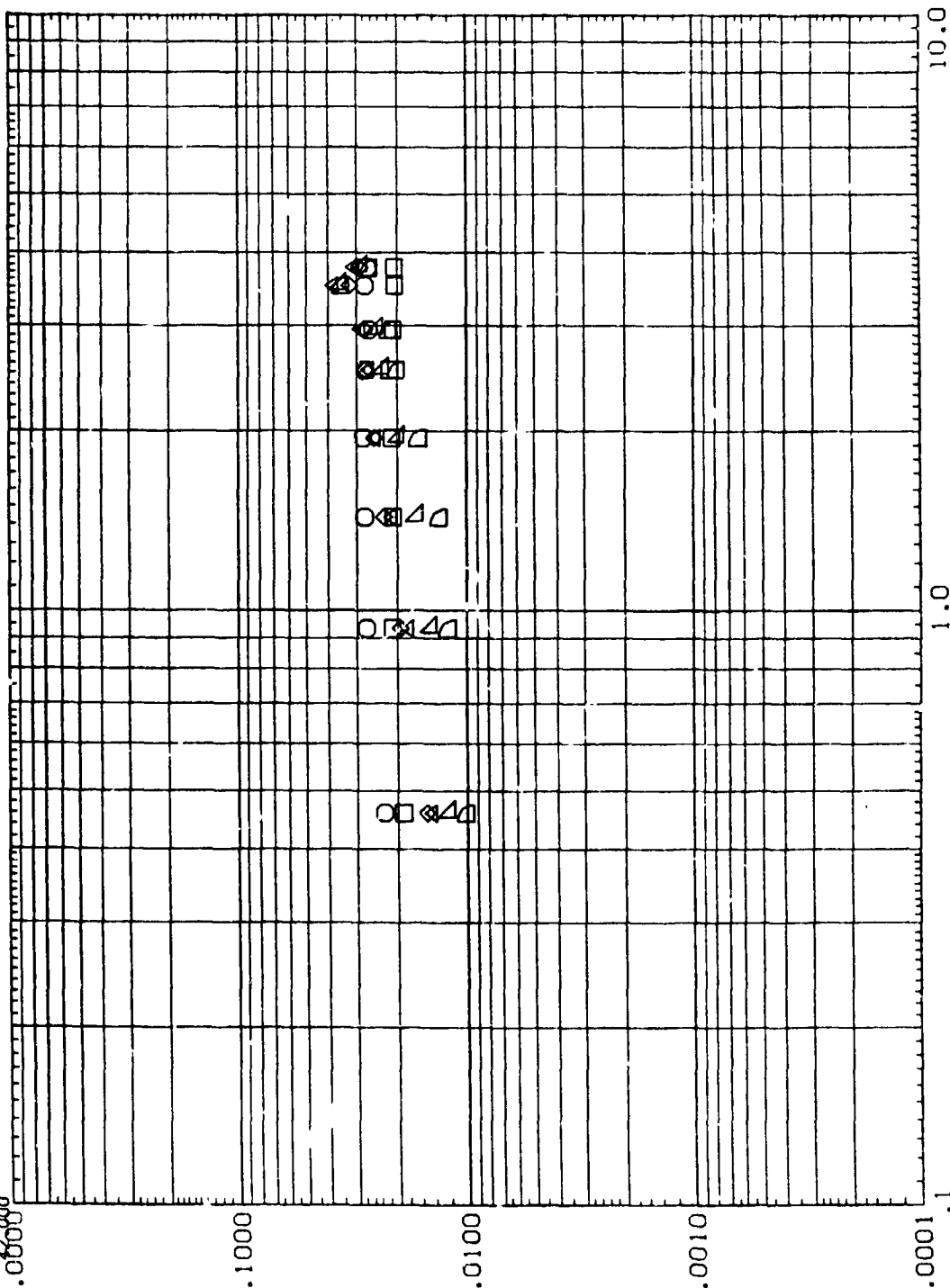
REYNOLDS NUMBER PER FOOT, MILLIONS. RN/L

FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	ELEVON	PARAMETRIC VALUES
▽	37.000	3.000	39.790	.000	.000	MACH
▽	38.000			.000	.000	RUDDER
◇	39.000					
□	40.000					
□	41.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF



REYNOLDS NUMBER PER FOOT, MILLIONS. RN/L

FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

W-21 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

TRACE ALPHA
 3.000 39.750

5100L
 43.000
 44.000
 45.000
 46.000
 47.000
 48.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/REF

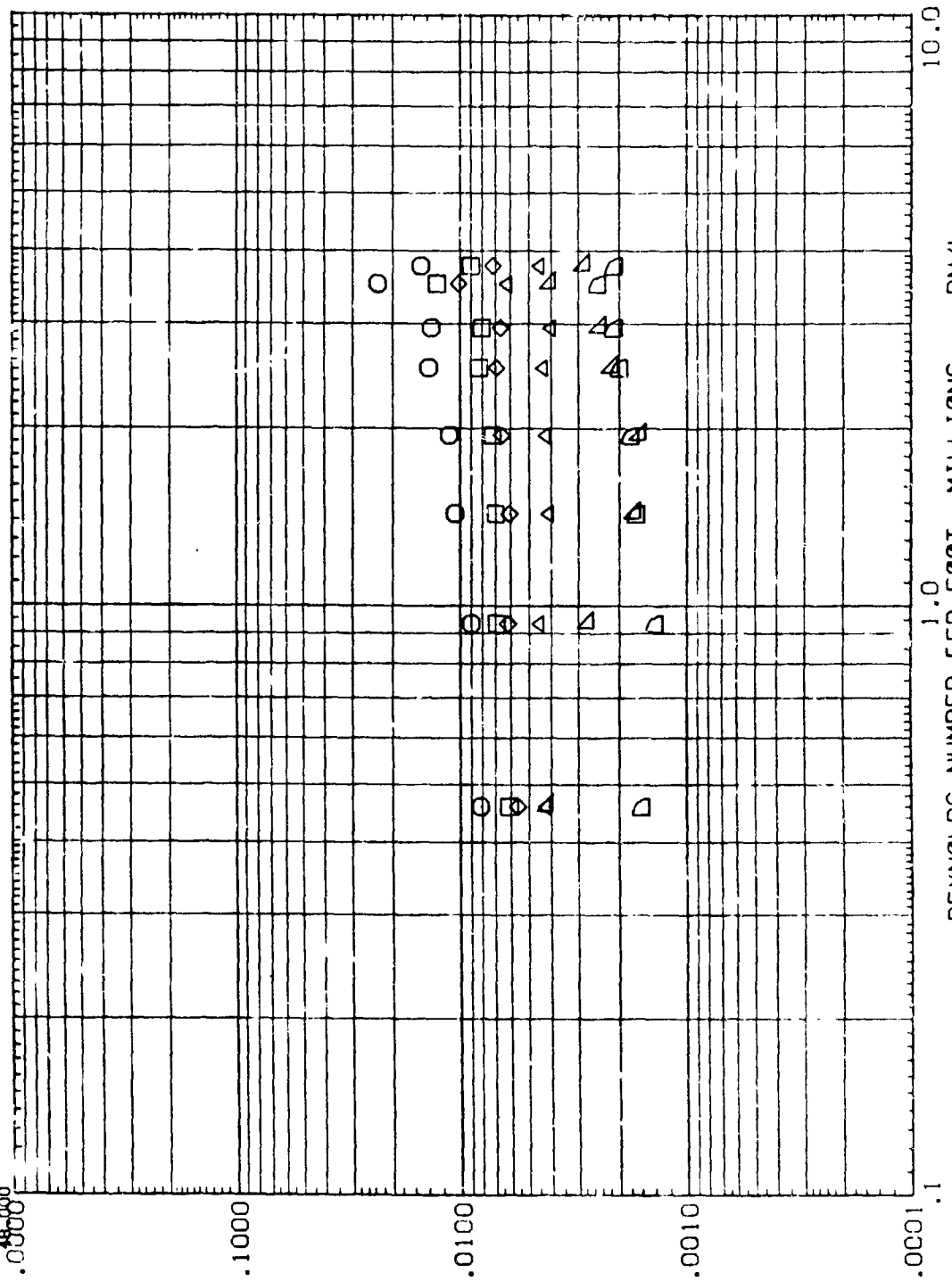


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO vs. RN/L FOR W. L. 400 TRACE T/C,S

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	PARAMETRIC VALUES
□	49.000	3.000	30.790	.000	MACH
◇	50.000			.000	RUDDER
◇	51.000				
◇	52.000				
◇	53.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

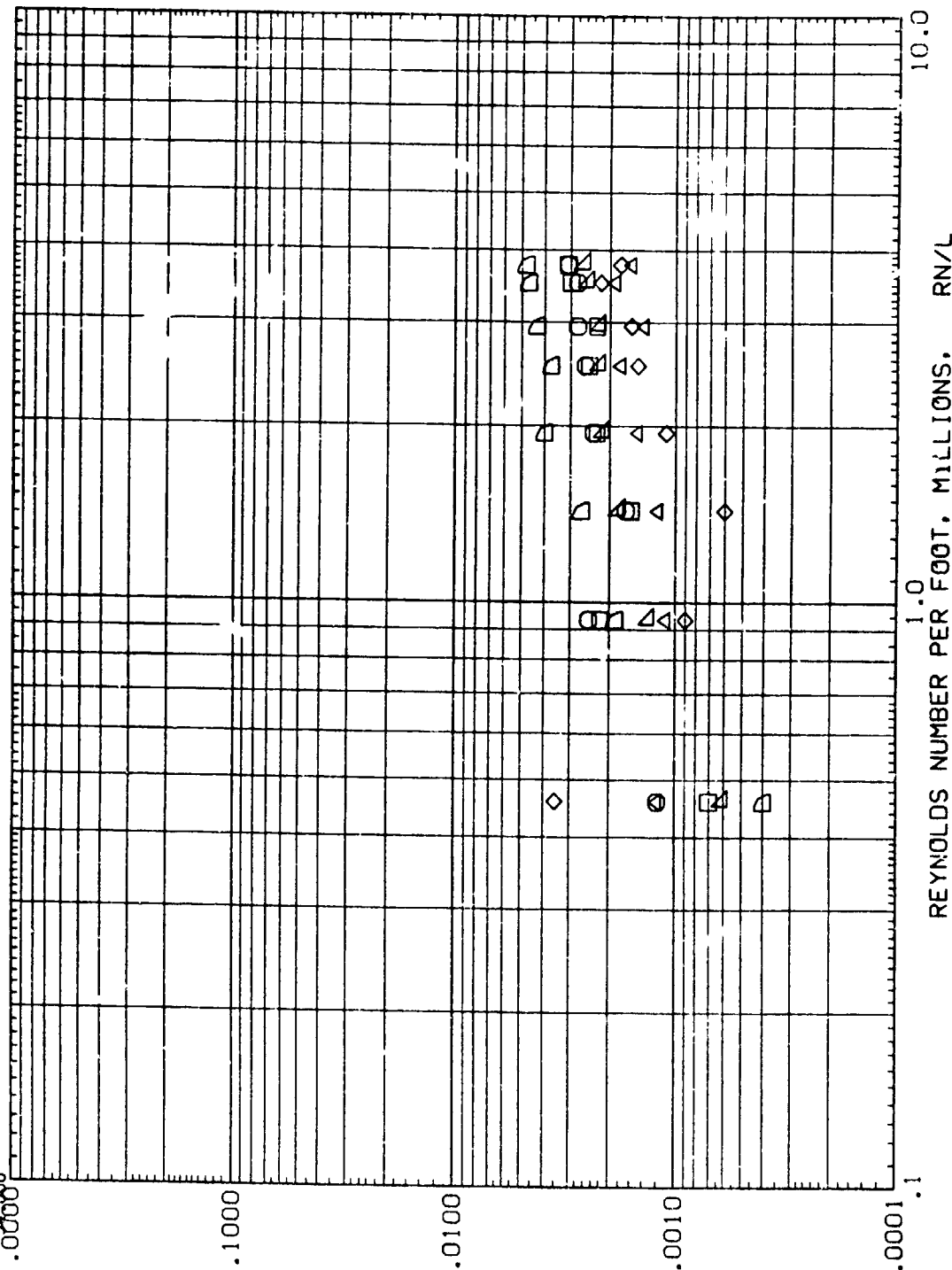


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL T/C NO TRACE ALPHA
O 55.000 3.000 39.790

PARAMETRIC VALUES
BETA ELEVON .000 MACH 8.000
RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

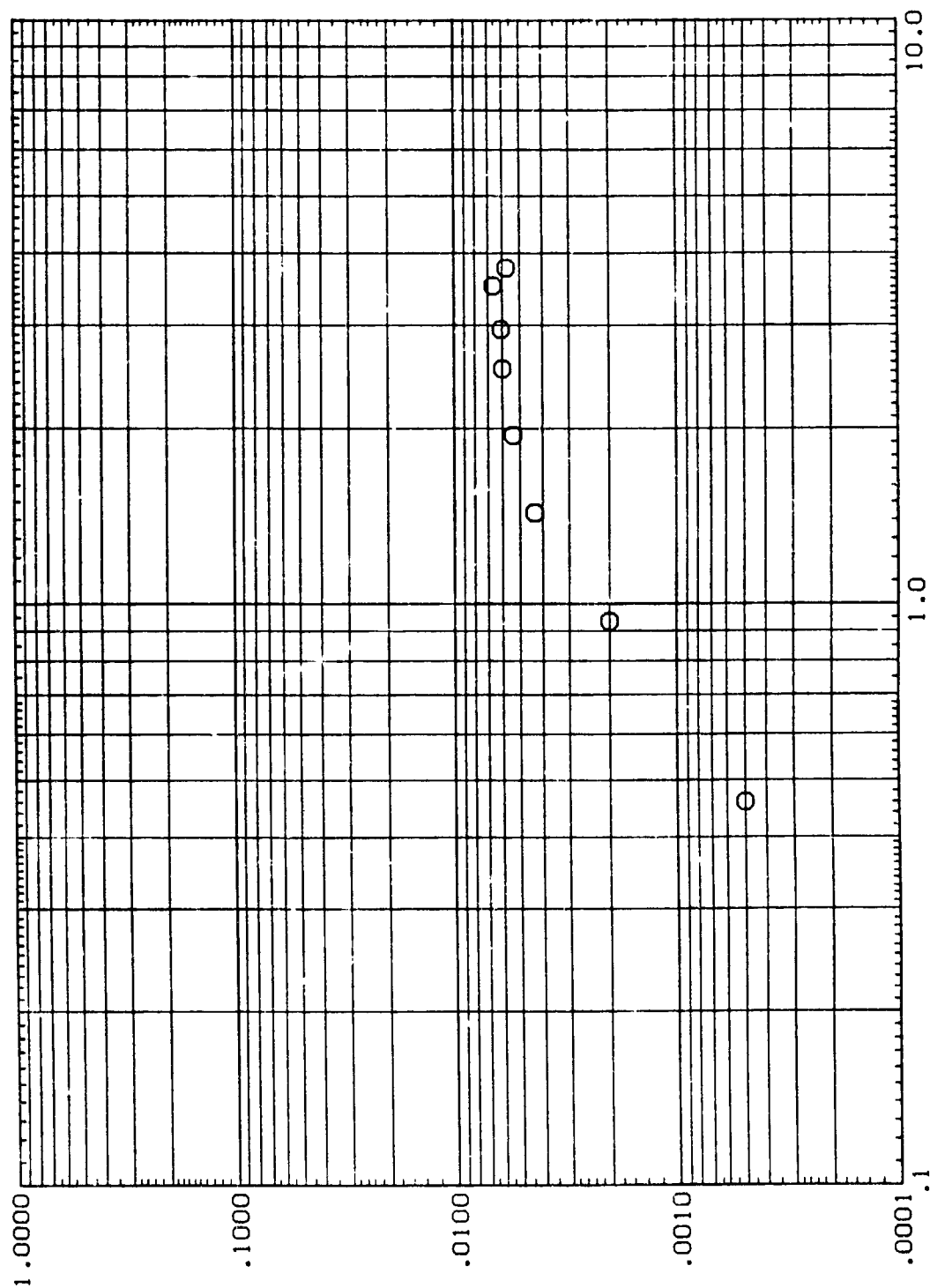


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	PARAMETRIC VALUES
□	31.000	3.000	43.840	.000	MACH
◇	32.000			.000	RUDDER
▽	33.000				
▽	34.000				
▽	35.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

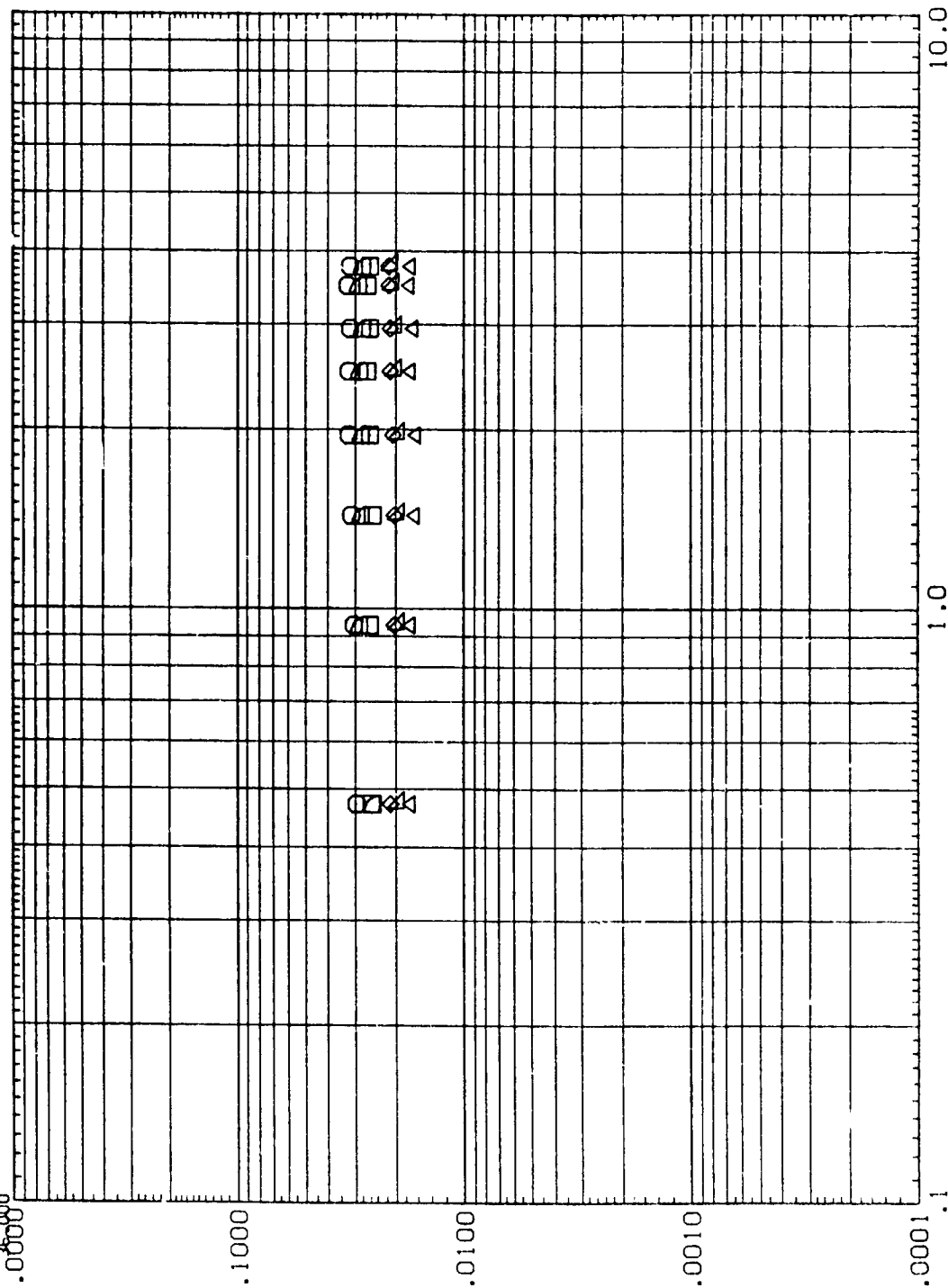


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SV8001)

SYMBOL	T/D	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	8.000
□	37.000	3.000	43.840	ELEVON	.000	RUDDER	.000
◇	38.000						
▽	39.000						
△	40.000						
○	41.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, ϕ_H/H_{REF}

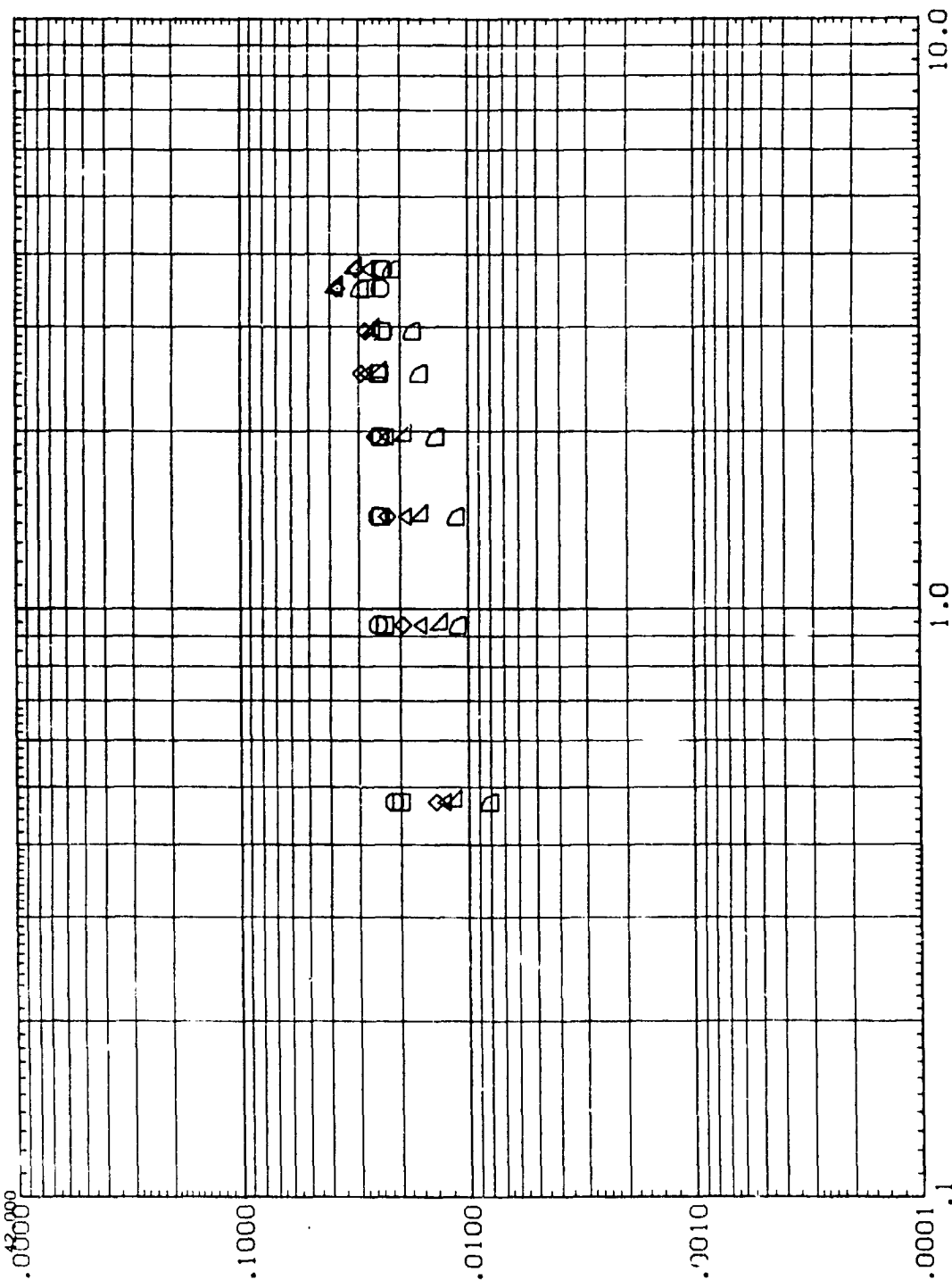


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB0001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	PARAMETRIC VALUES
○	43.000	3.000	43.840	ELEVON	.000 MACH .000 RUDDER
□	44.000				
◇	45.000				
△	46.000				
▽	47.000				
◇	48.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

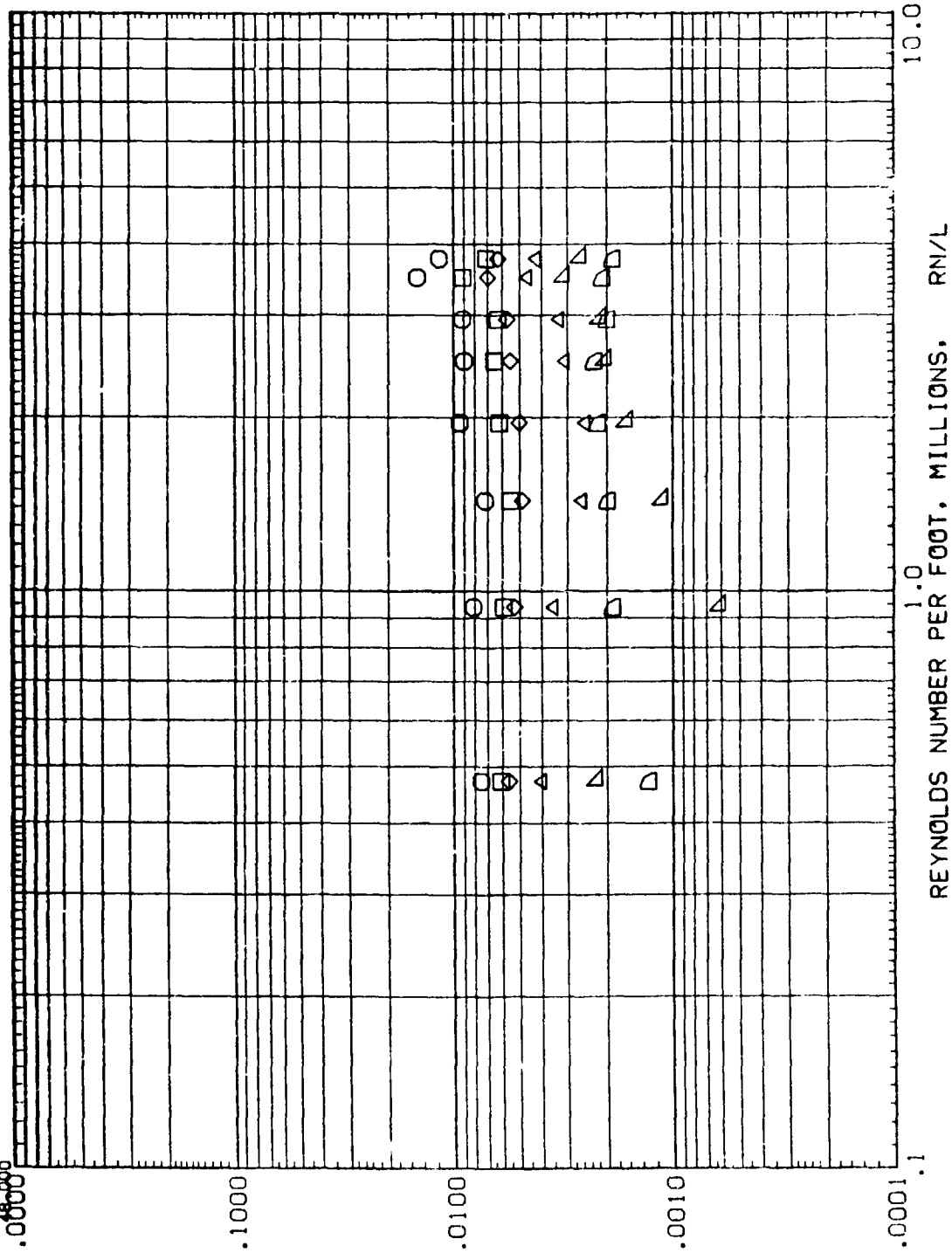


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C.S

Q4-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C ID	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	8.000
□	49.000	3.000	43.840	ELEVON	.000	RUDDER	.000
◇	50.00						
▽	51.000						
△	52.000						
□	53.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

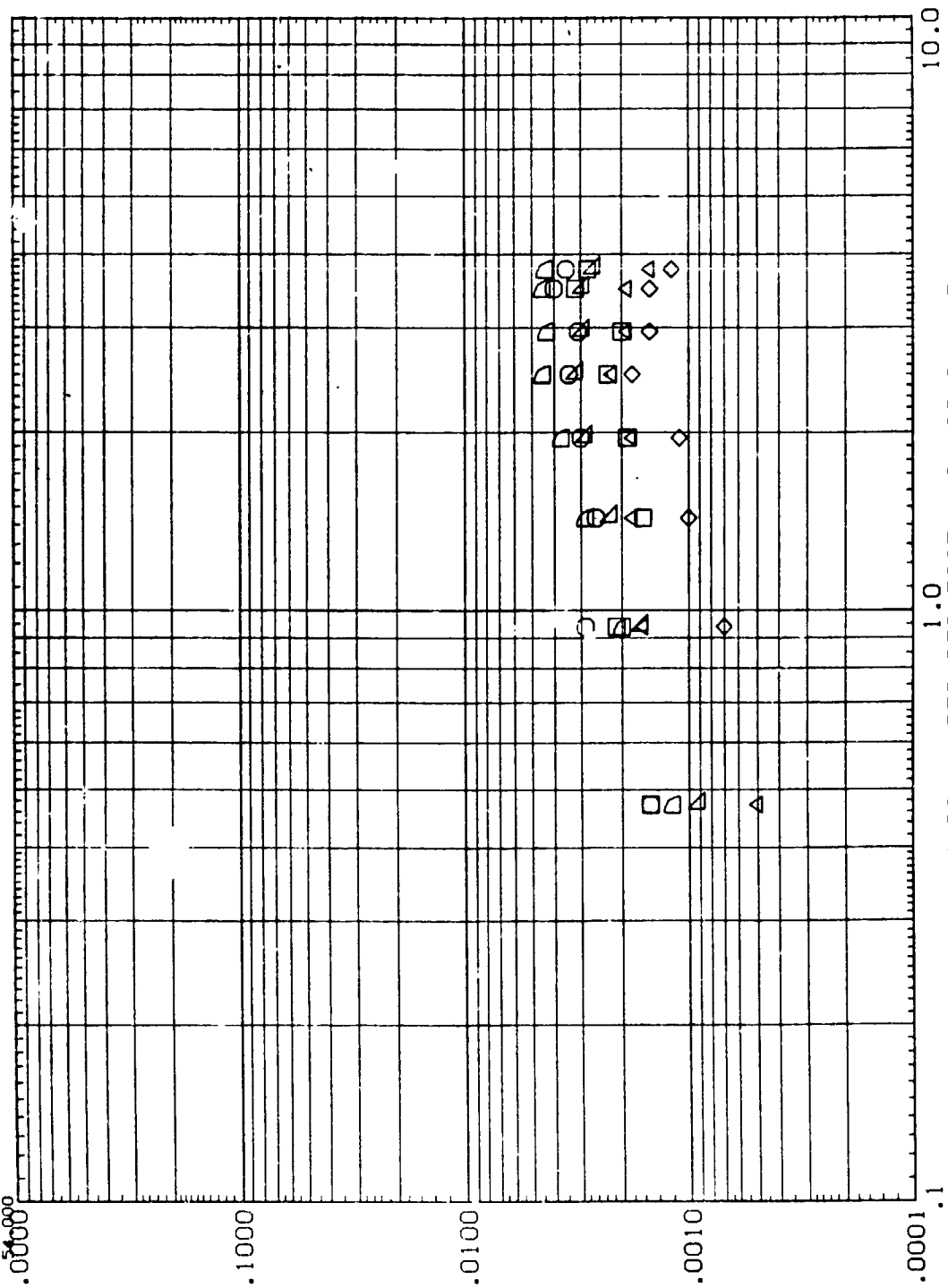


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
○	55.000	3.000	43.840	BETA	MACH	8.000
				ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

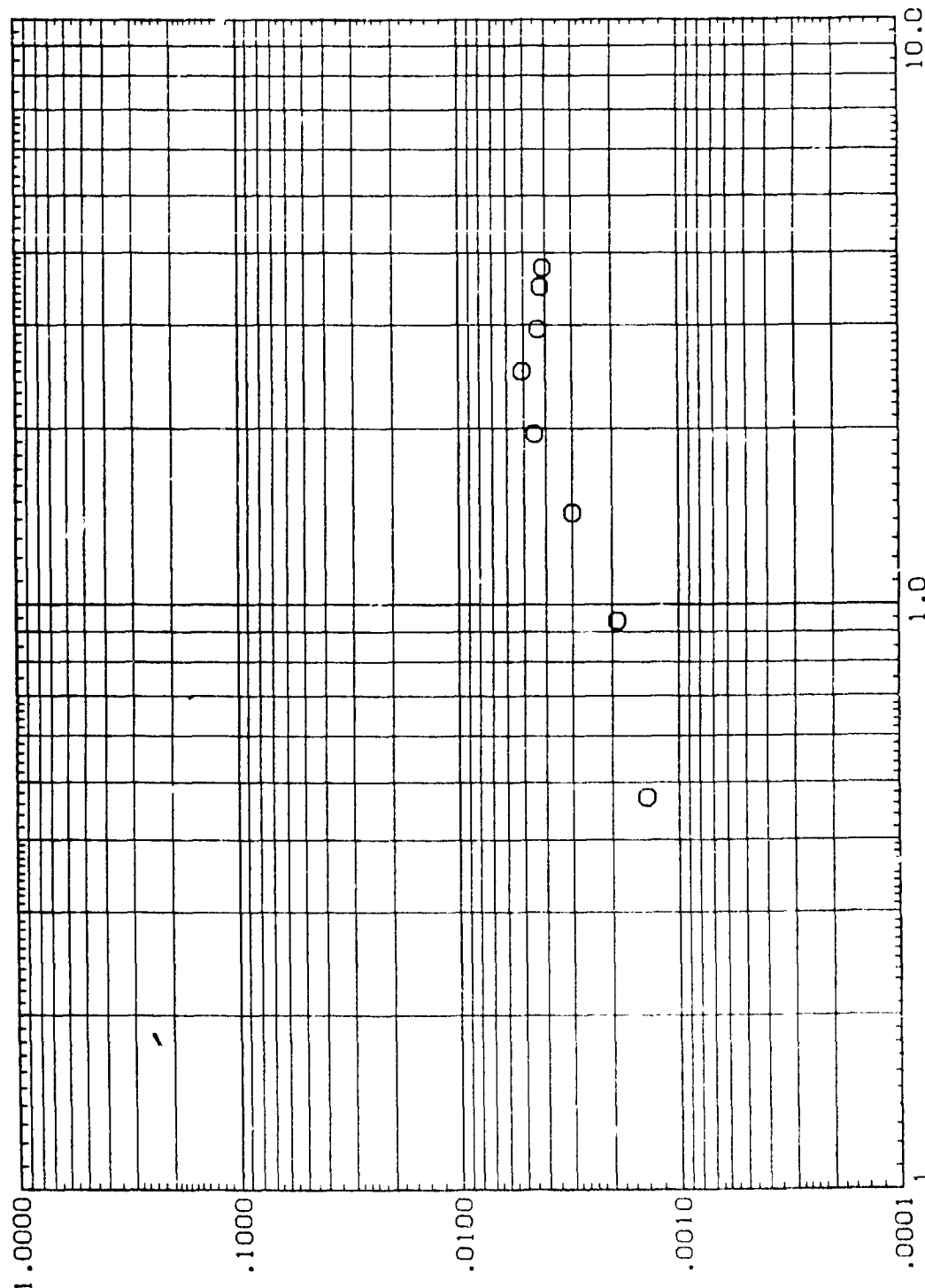


FIG. 26 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR W. L. 400 TRACE T/C,S

3H-74 (ALDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	ELEVON	PARAMETRIC VALUES	MACH	RUDDER
○	71.000	4.000	19.710			.000	8.000	.000
□	72.000					.000		
◇	73.000							
▽	74.000							
△	56.000							
▽	57.000							

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

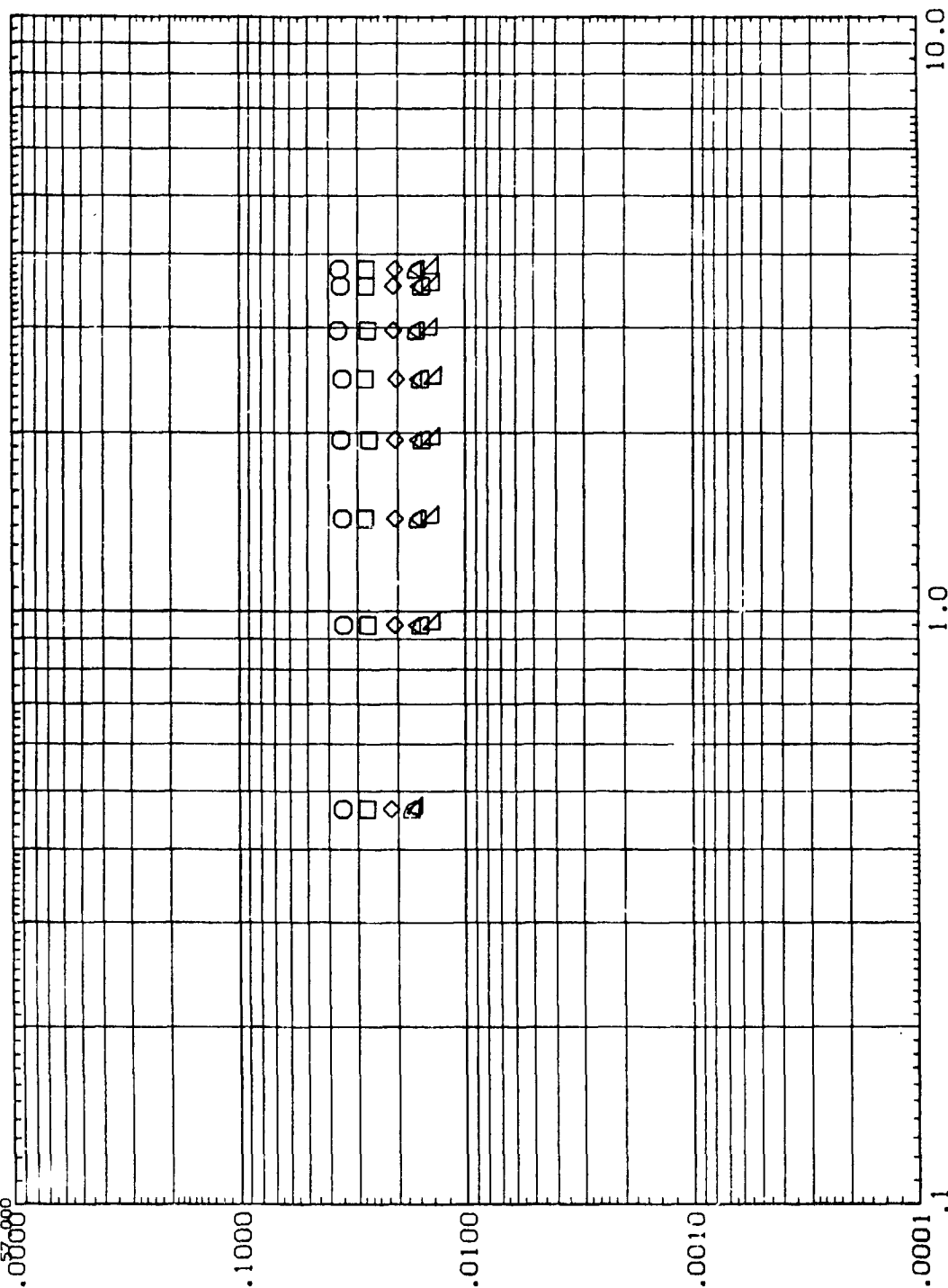


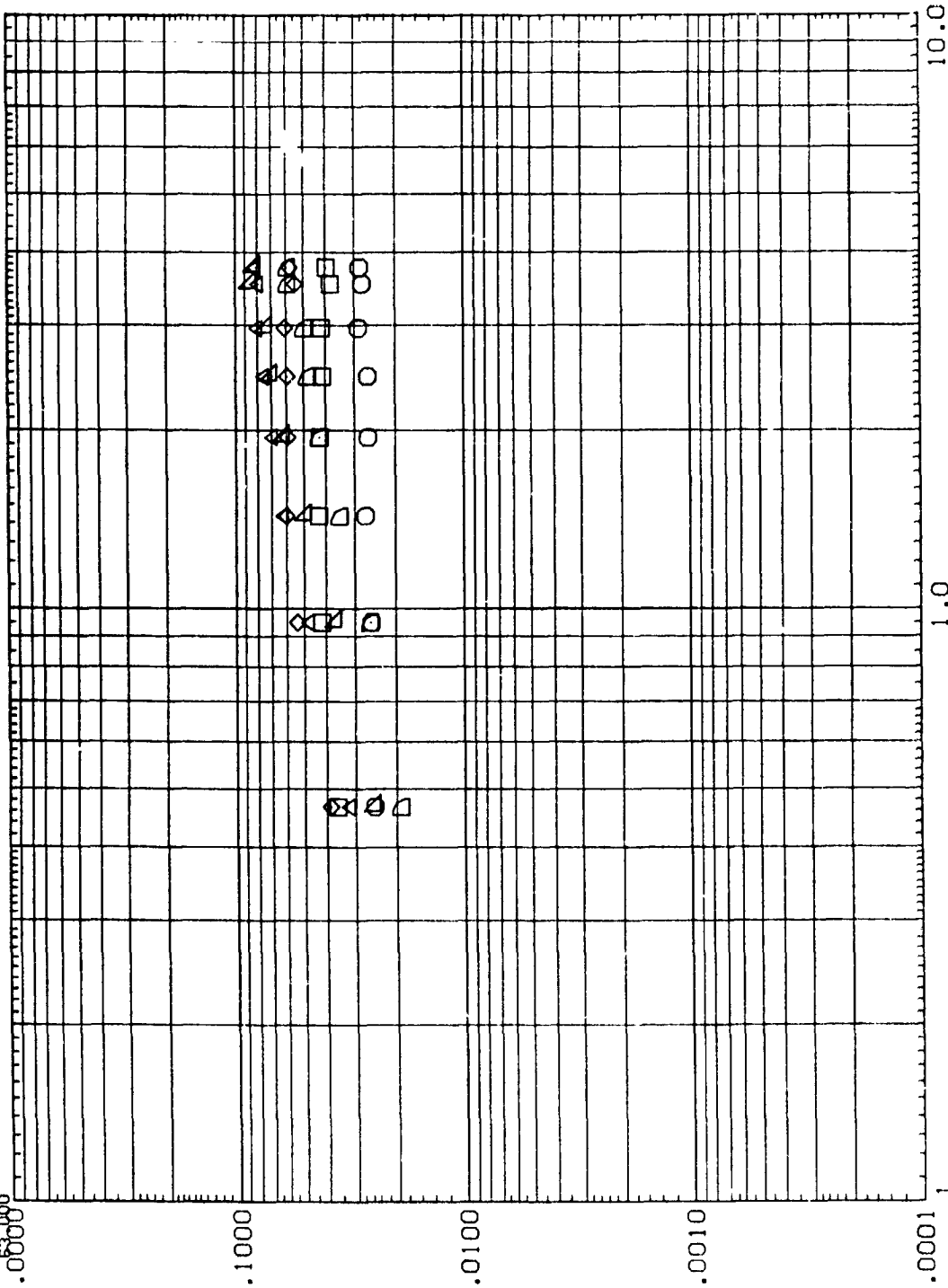
FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	PARAMETRIC VALUES
□	58.000	4.000	19.710	.000	MACH
◇	59.000			.000	RUDDER
△	60.000				
▽	61.000				
▽	62.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF



REYNOLDS NUMBER PER FOOT. MILLIONS. RN/L

FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

OH-7: (AELC V413-38A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 .000 MACH 8.000
 .000 RUDDER .000

TRACE ALPHA
 4.000 13.710

T/C NO
 64.000
 65.000
 66.000
 67.000
 68.000

SYMBOL
 ▽ ▽ ▽ ▽ ▽

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

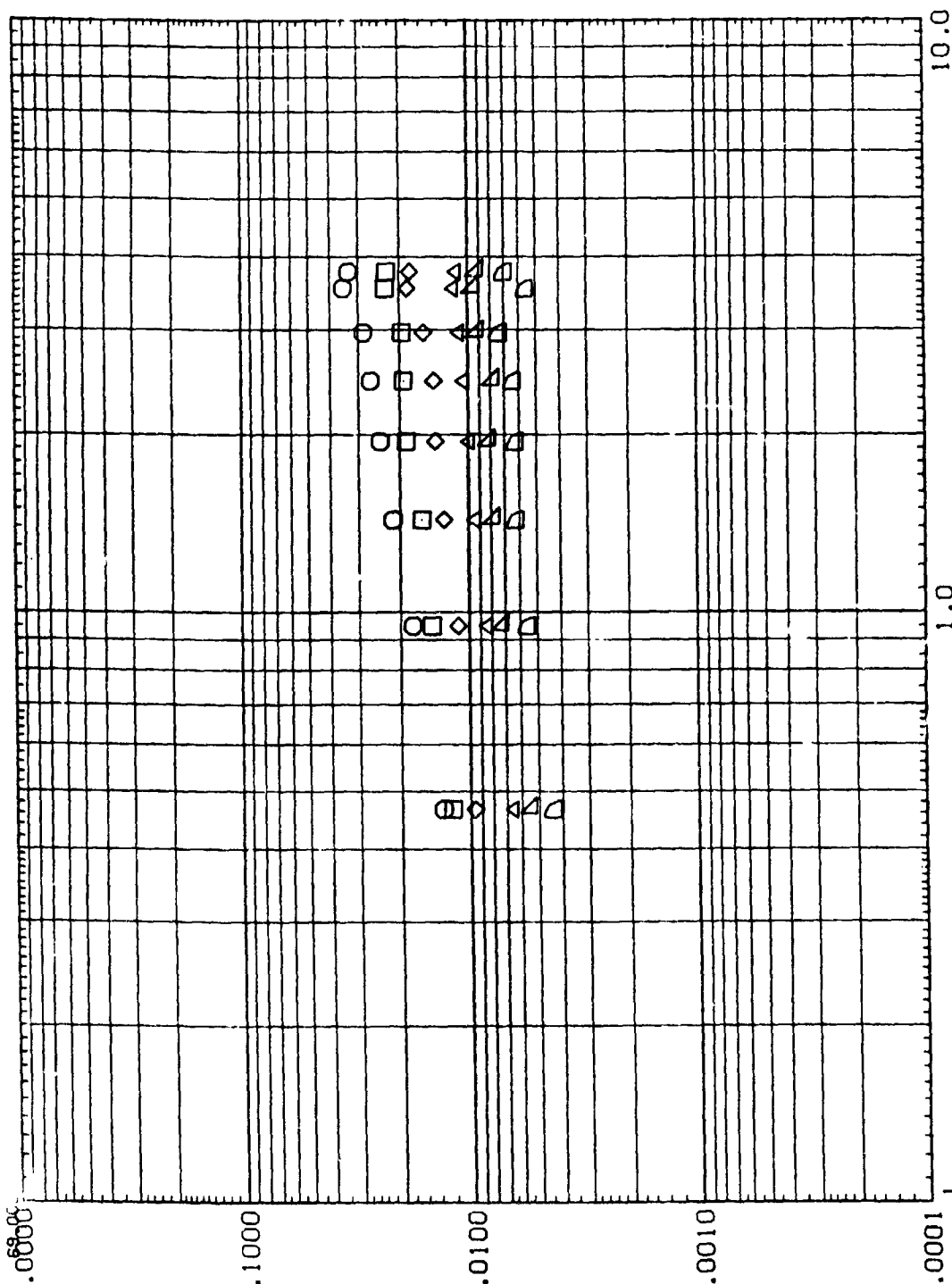


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA ELEVON	MACH	RUDDER
□	70.000	4.000	19.710	.000	.000	8.000
◇	75.000			.000		.000
▽	76.000					
▽	77.000					
▽	78.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

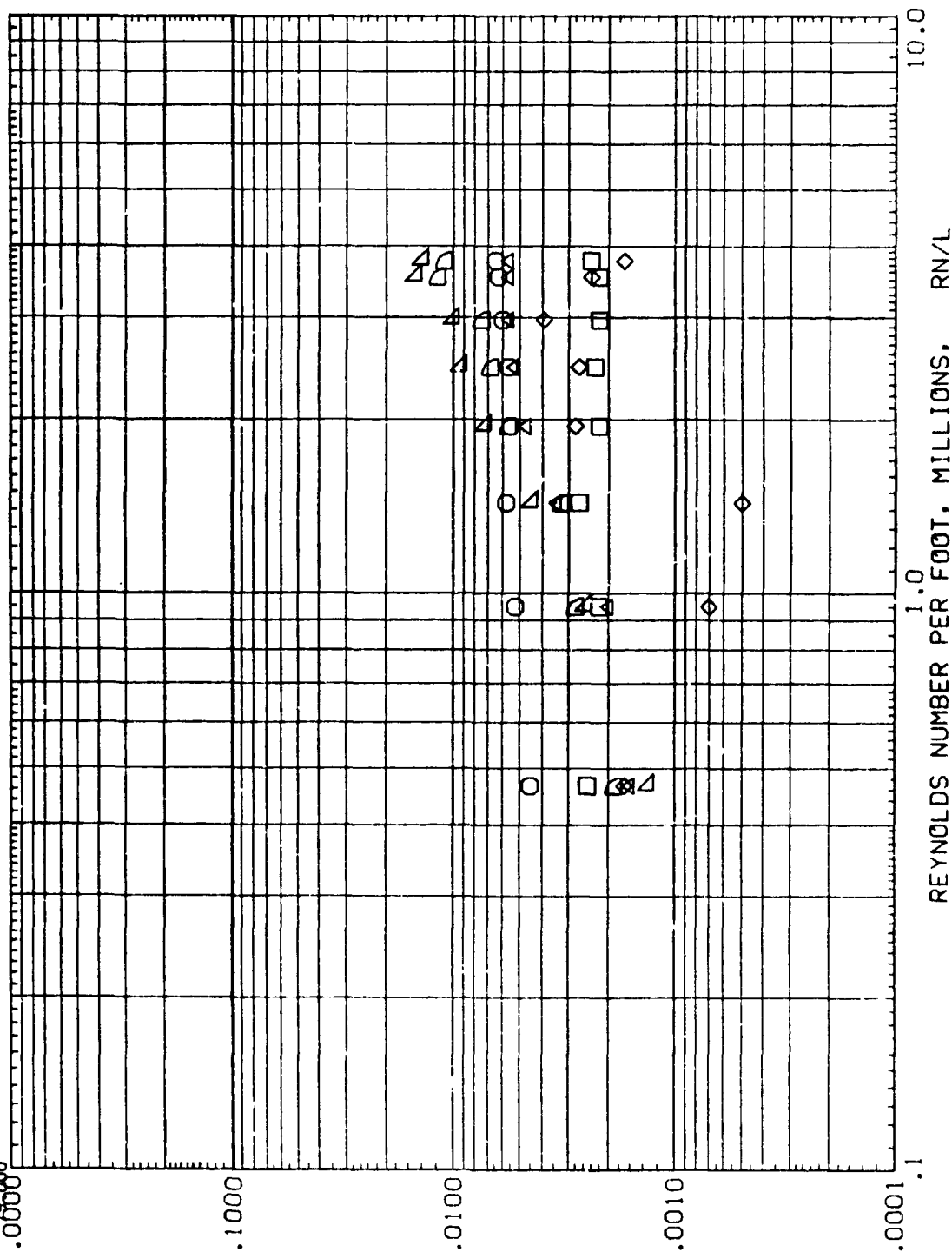


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

CH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
O	80.00.1	4.000	19.710	BETA	MACH	8.000
				ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

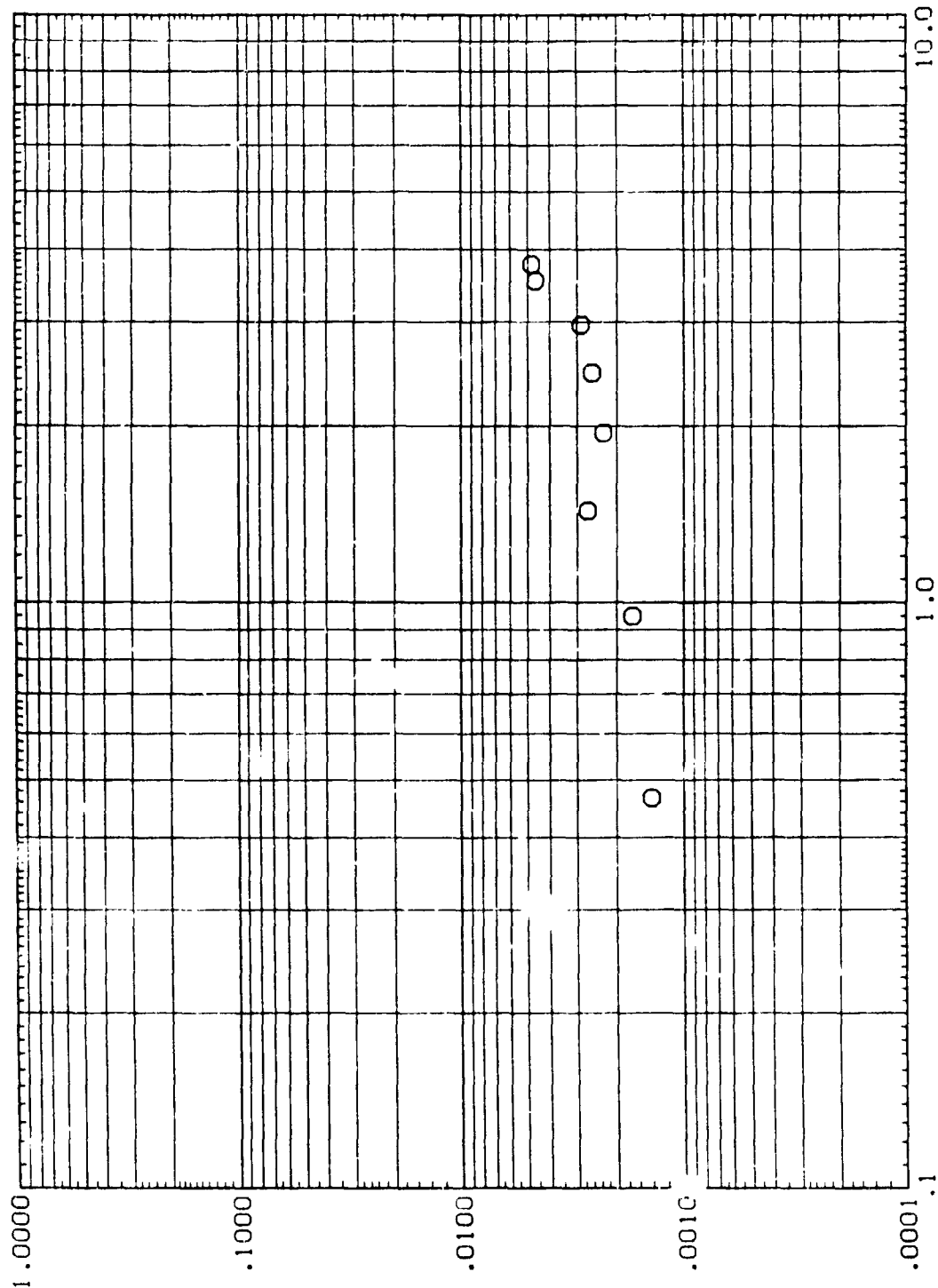


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL T/C NO TRACE ALPHA
 71.000 4.000 24.830
 72.000
 73.000
 74.000
 56.000
 57.000

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

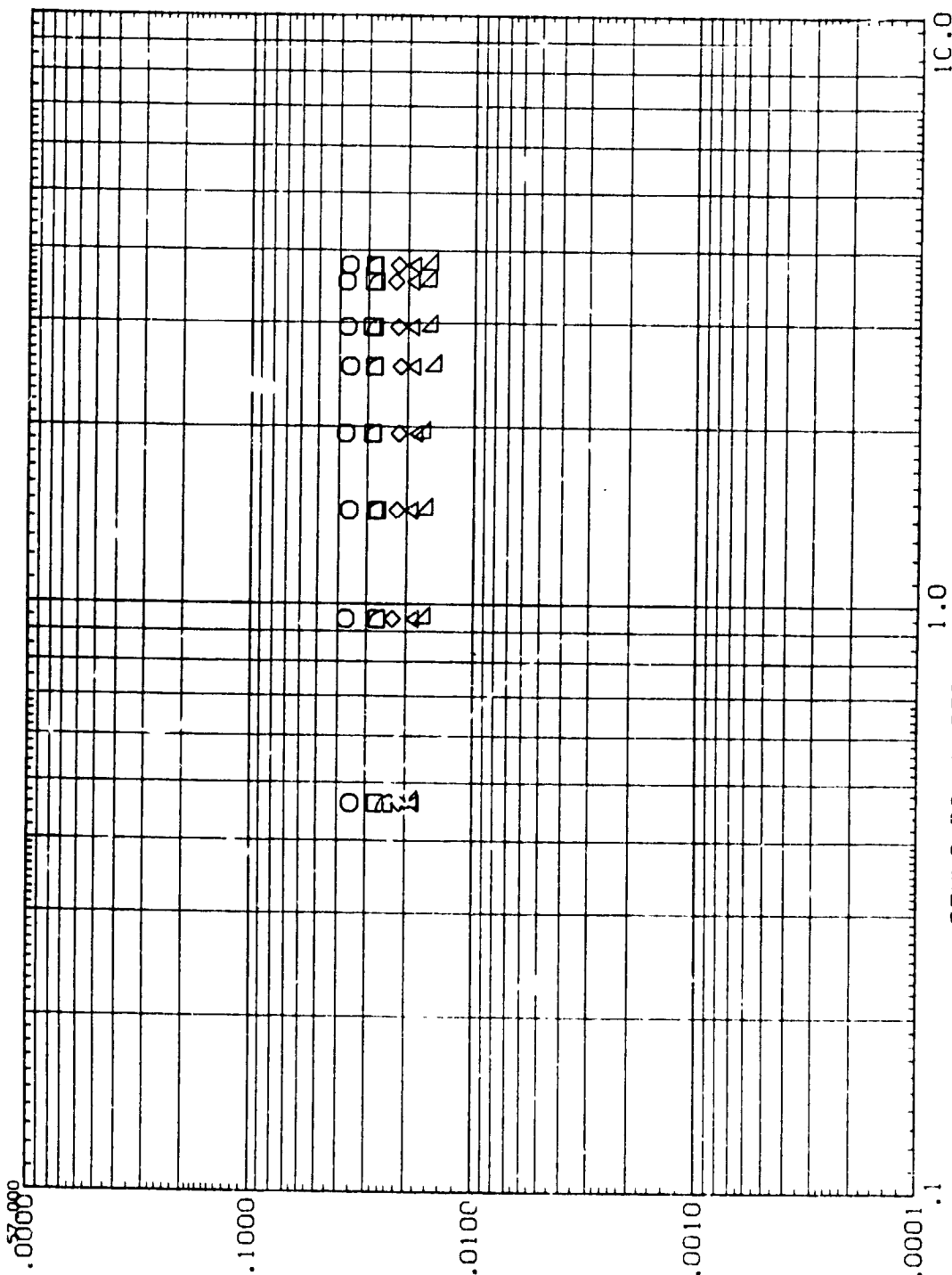


FIG. 27 REYNOLDS NUMBER PER FOOT, MILLIONS. RN/L
 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

P/RAMETRIC VALUES
 .000 MACH
 .000 RUDDER
 .000

BETA
 ELEVON

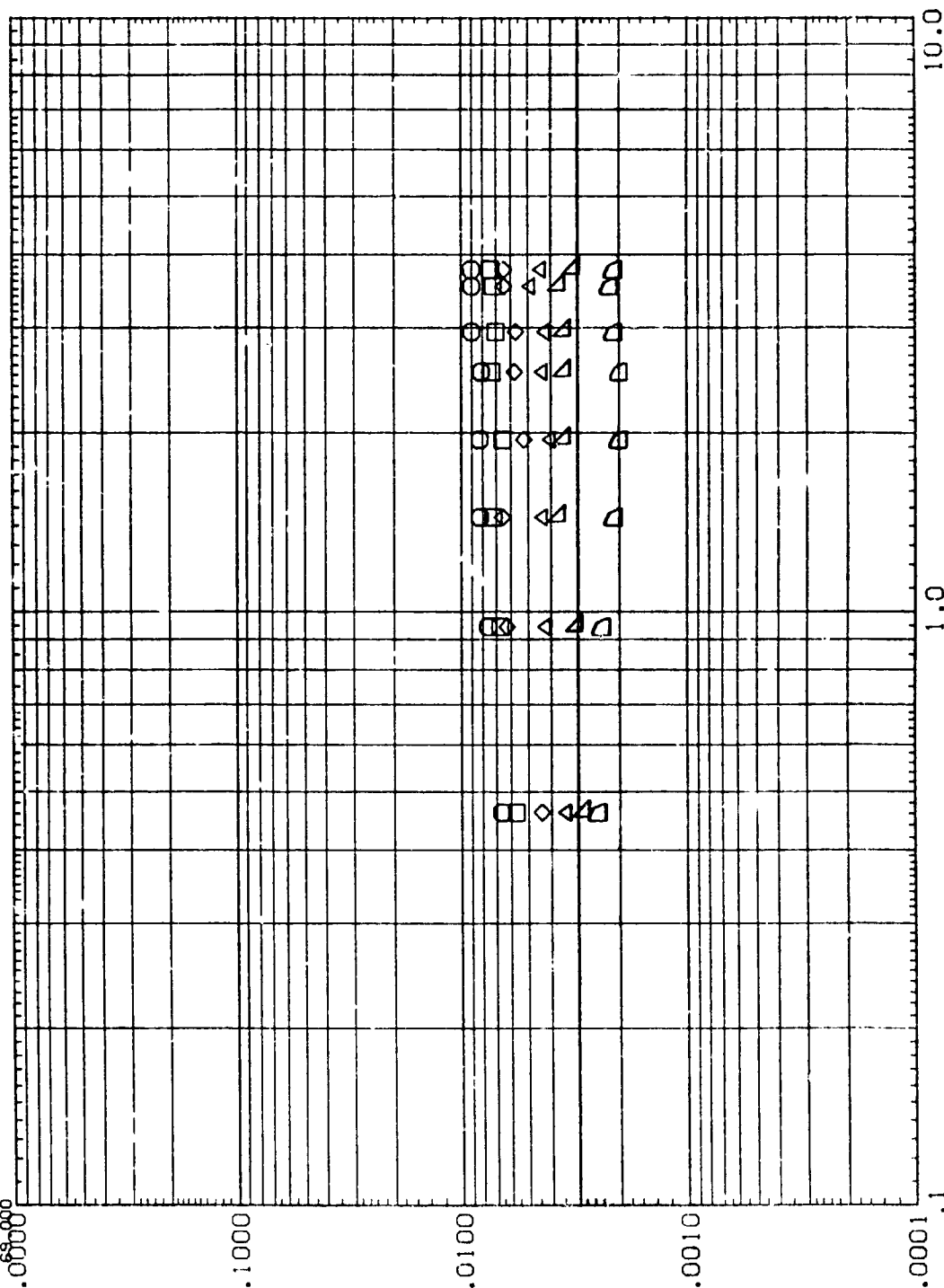
ALPHA
 24.83C

TRACE
 4.000

T/C NO
 64.000
 65.000
 66.000
 67.000
 68.000

SYMBOL
 □
 ◇
 △
 ○

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF



REYNOLDS NUMBER PER FOOT, MILLIONS. RN/L

FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

CH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	ELEVON	PARAMETRIC VALUES	MACH	RUDDER
□	70.000	4.000	24.830				.000	
◇	75.000						.070	
△	76.000							.001
▽	77.000							
▽	78.000							

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

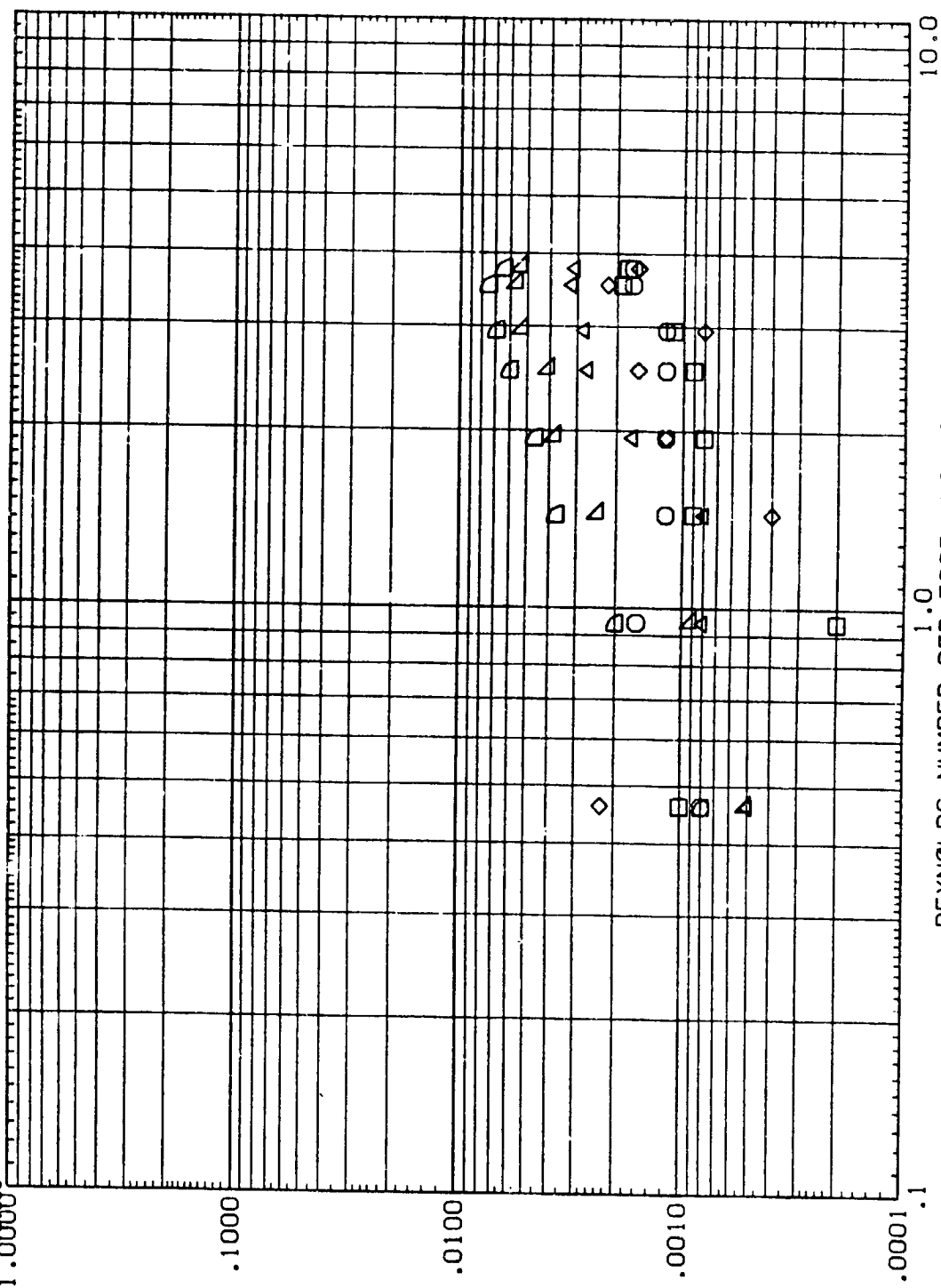


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL O	T/C NO 80.000	TRACE 4.000	ALPHA 24.830	PARAMETRIC VALUES		
				BETA ELEVON	MACH .000	RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

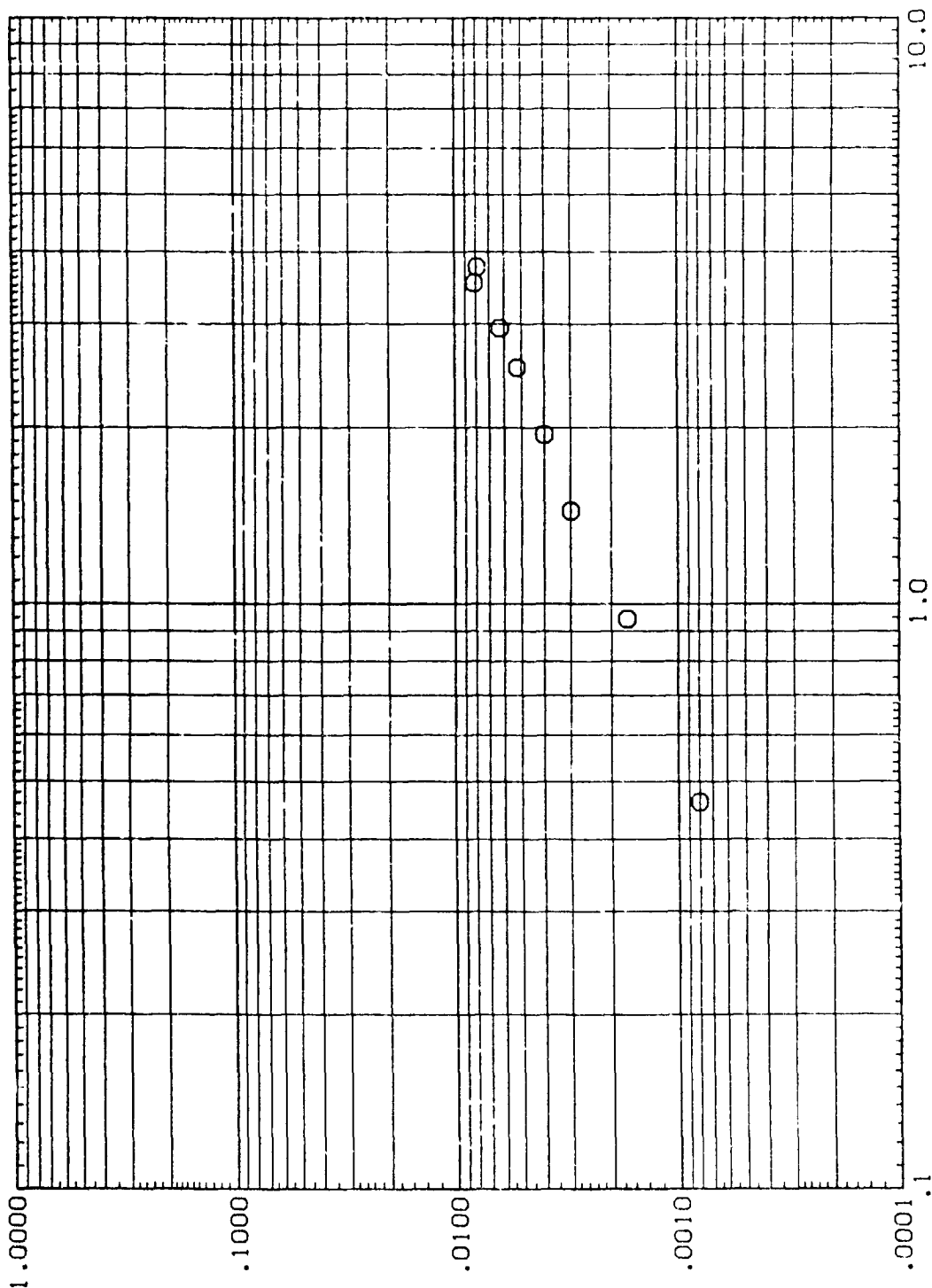


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

0H-74 (AEC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
BETA .000 MACH 8.000
ELEVON .000 RUDDER .000

TRACE ALPHA
4.000 29.770

T/C NO
71.000
72.000
73.000
74.000
56.000
57.000

SYMBOL
□
◇
▽
△
○

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

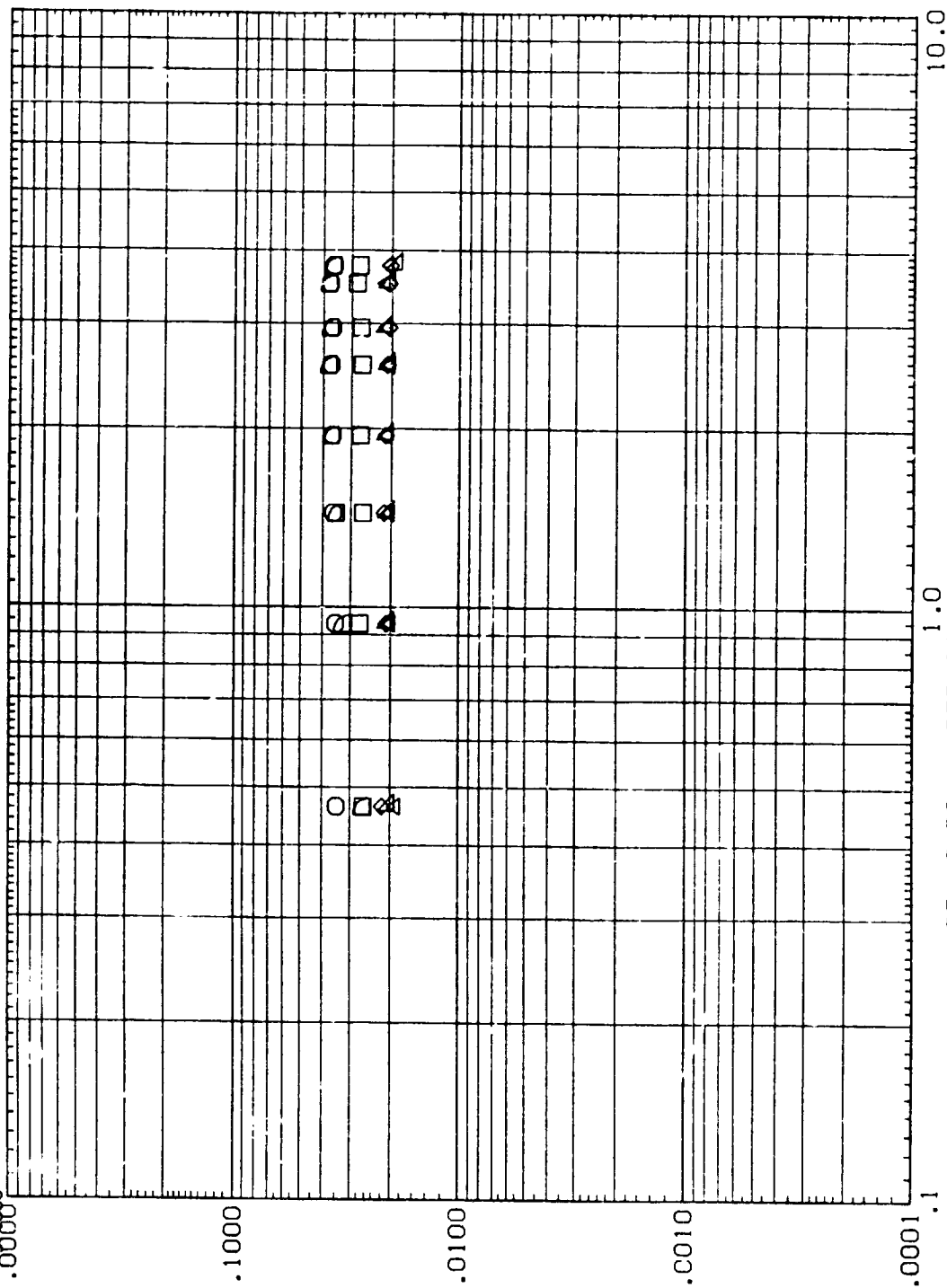
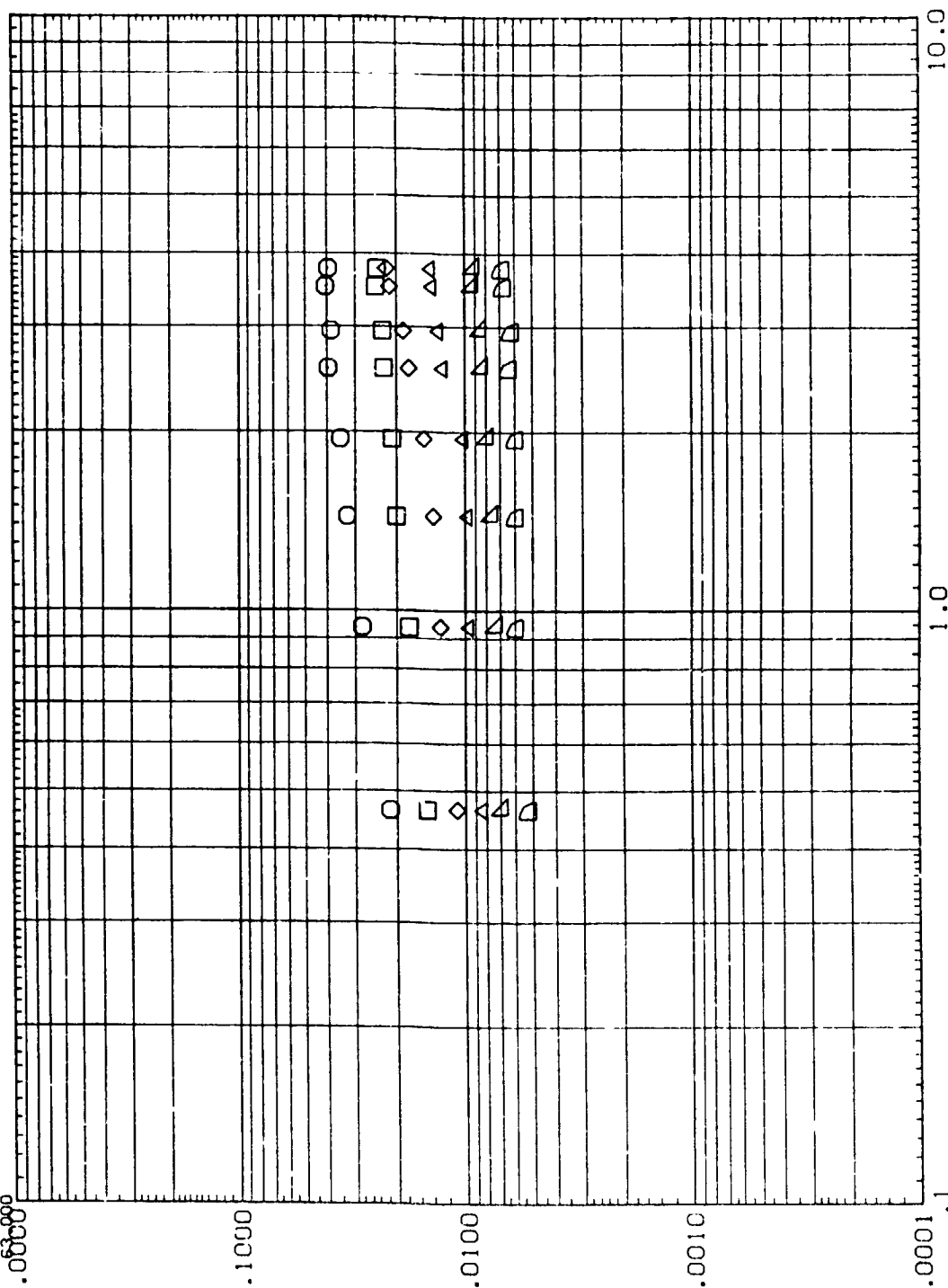


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L. 3 TRACE LINE A/B T/C,S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	8.000
○	58.000	4.000	29.770	ELEVON	.000	RUDDER	.000
□	59.000						
◇	60.000						
△	61.000						
▽	62.000						
▽	63.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF



REYNOLDS NUMBER PER FOOT. MILLIONS. RN/L

FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

UNIT (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C	IRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	8.000
	64.000	4.000	29.770	ELEVON	.000	RUDDER	.000

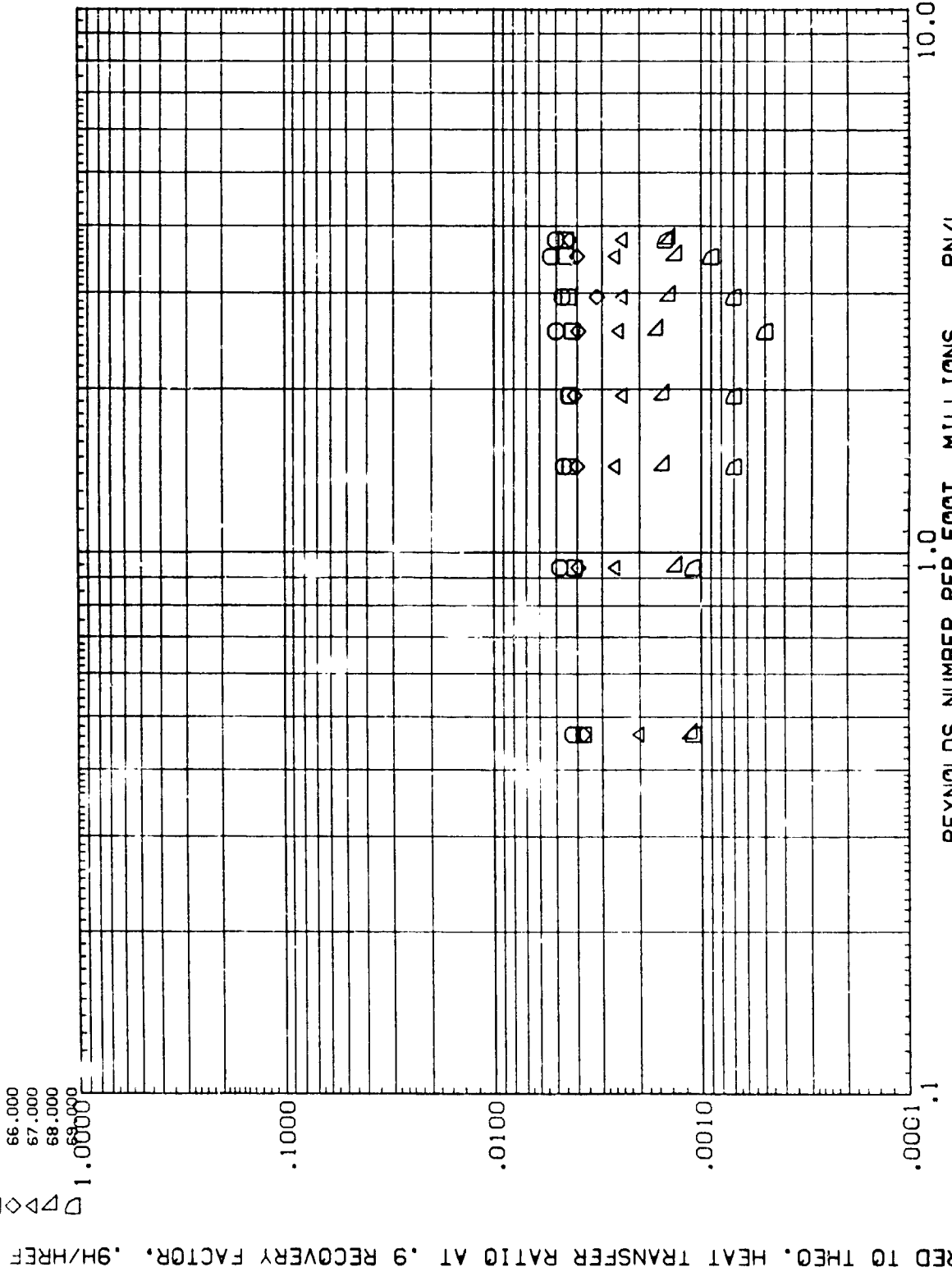


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
◇	70.000	4.000	29.770	BETA	MACH	8.000
◇	75.000			ELEVON	RUDDER	.000
◇	76.000					
◇	77.000					
◇	78.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

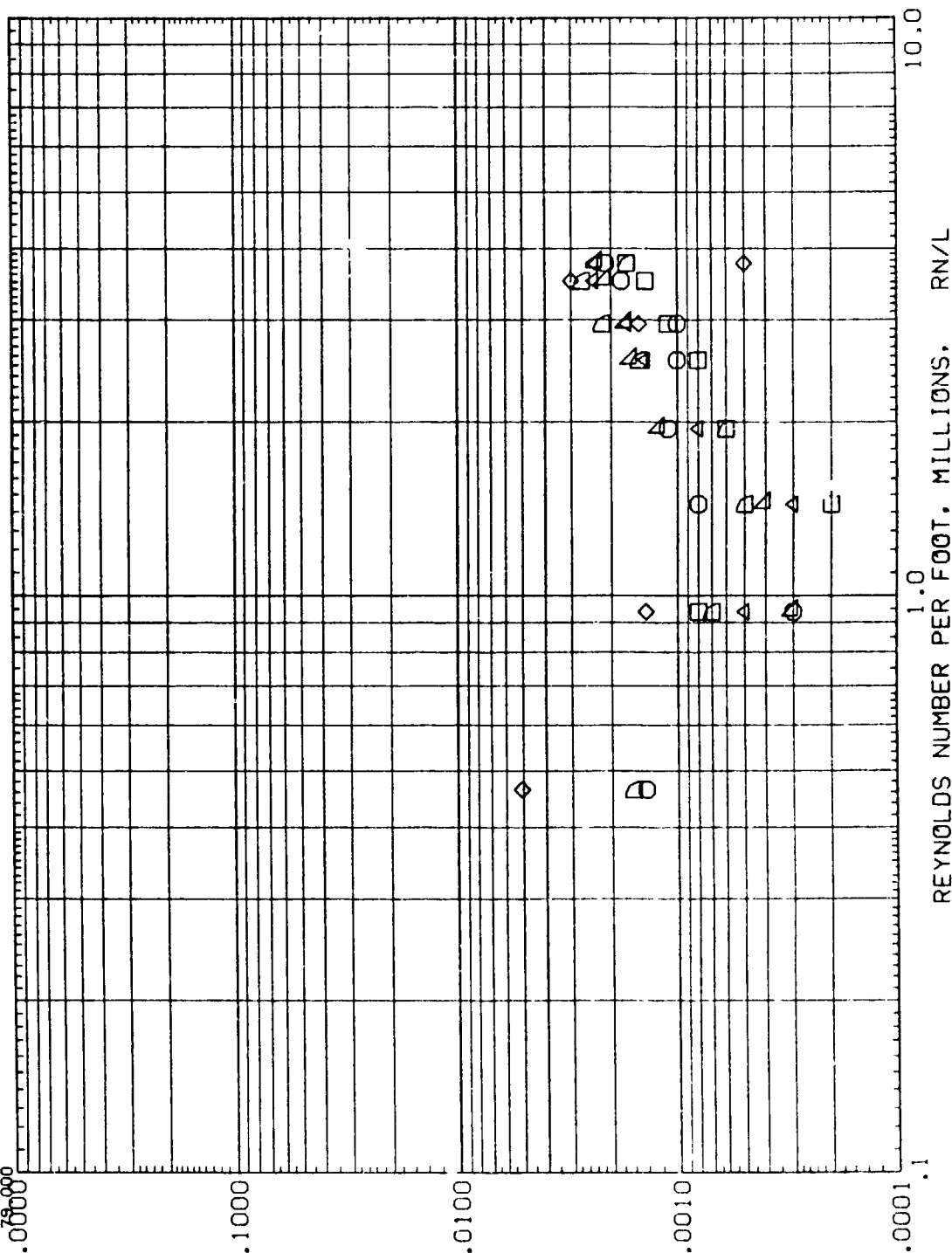


FIG. HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

0H-74 (AEDC V41B-88A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
○	80.000	4.000	29.770	BETA	MACH	8.000
				ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

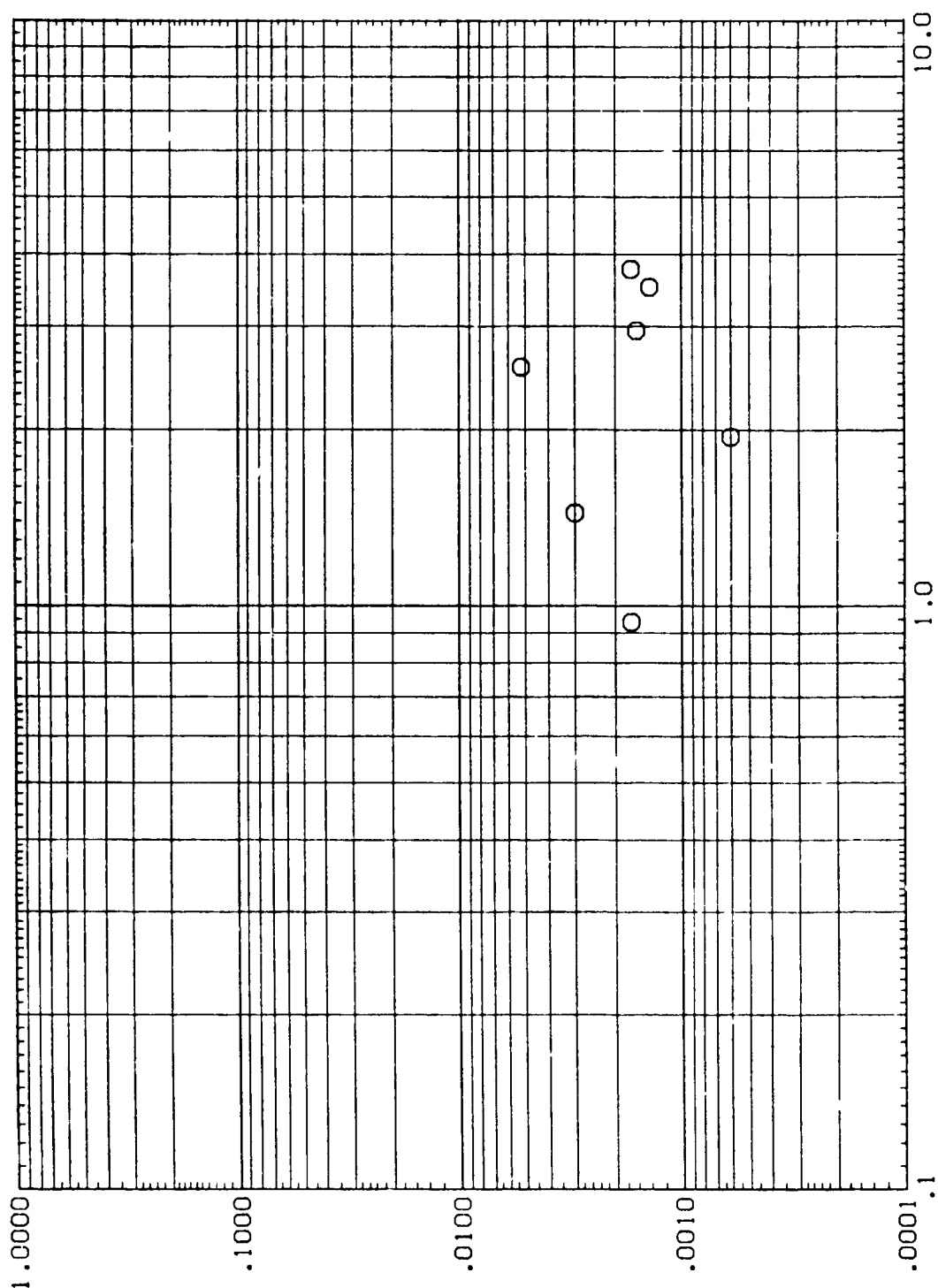


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	8.000
	58.000	4.000	34.760	ELEVON	.000	RUDDER	.000
	59.000						
	60.000						
	61.000						
	62.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

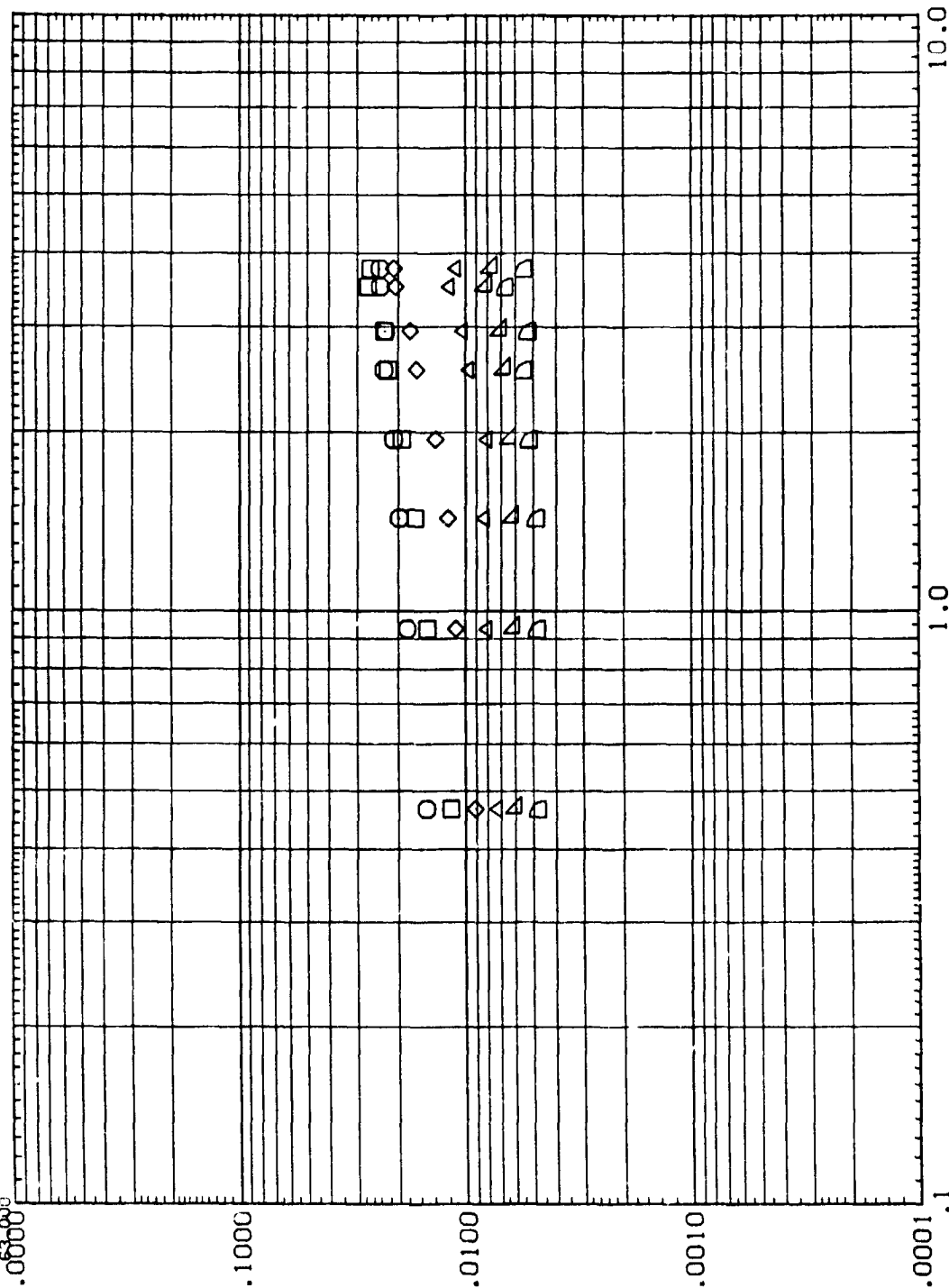


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
□	64.000	4.000	34.760	BETA	.000	MACH
◇	65.000			ELEVON	.000	RUDDER
△	66.000					
▽	67.000					
○	68.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/REF

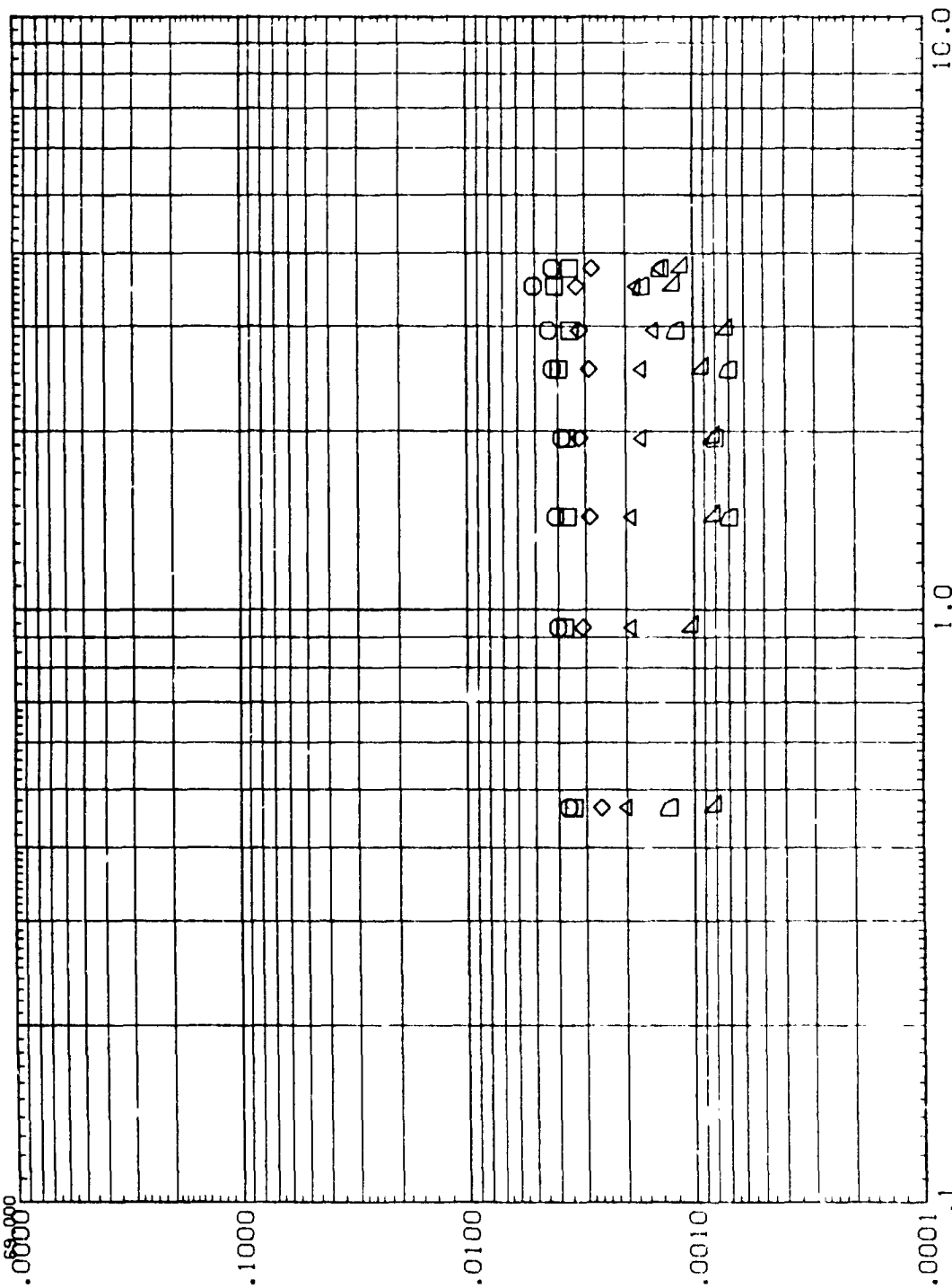


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

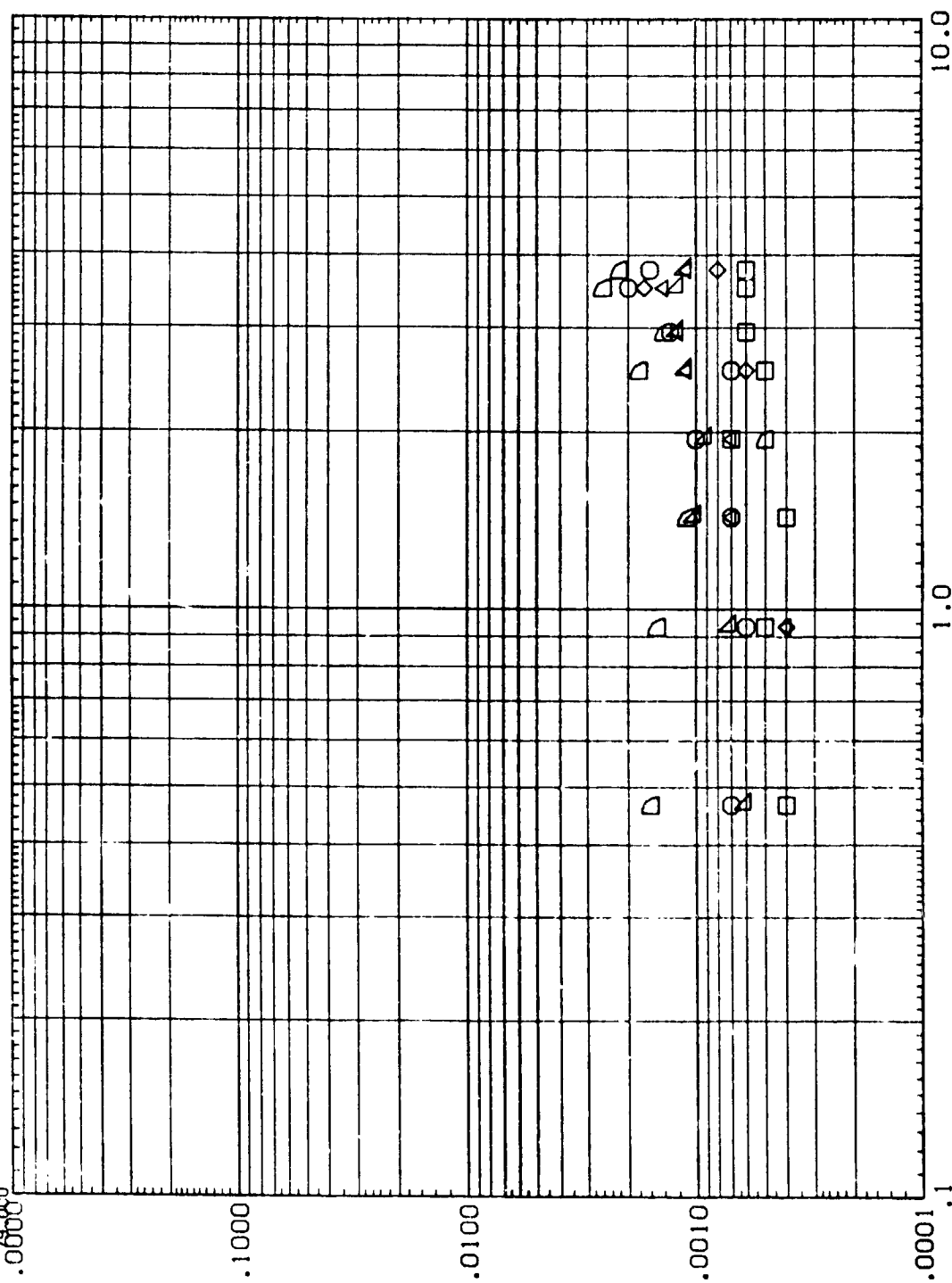
OH-74 (AEDC 41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

T/C 70.000
 75.000
 76.000
 77.000
 78.000

SYMBOL
 □
 ◇
 △
 ▽
 ▽

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF



REYNOLDS NUMBER PER FOOT, MILLIONS, RN/L

FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL
O

T/C NO
80.000

TRACE
4.000

ALPHA
34.760

PARAMETRIC VALUES
MACH
8.000
RUDDER
.000

BETA
ELEVON

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

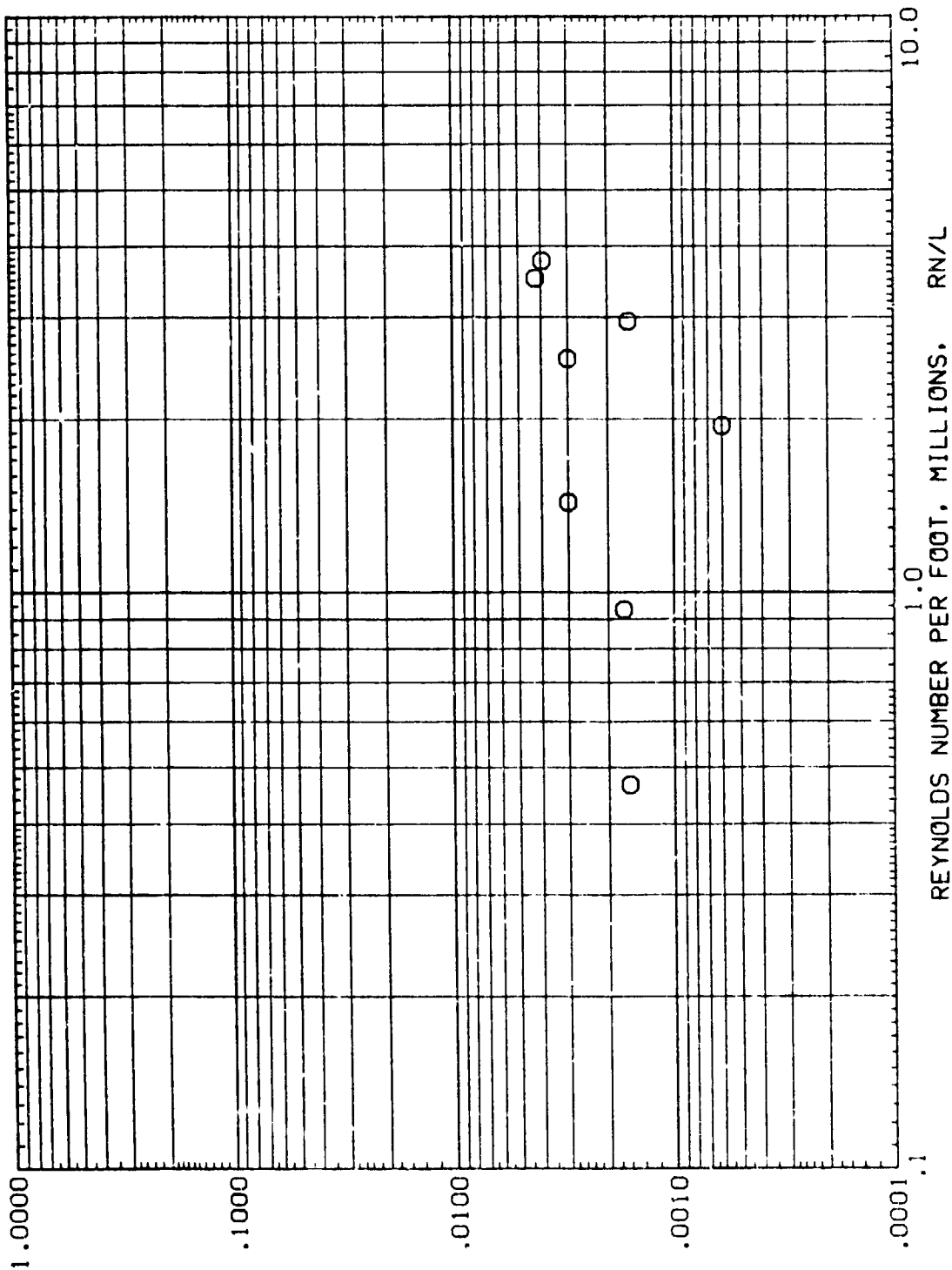


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

011-74 (AEDC V419-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	I/C NO	TRACE	ALPHA	PARAMETRIC VALUES		
	71.000	4.000	39.790	BETA	.000	MACH
	72.000			ELEVON	.000	RUDDER
	73.000					
74.000						
56.000						
57.000						

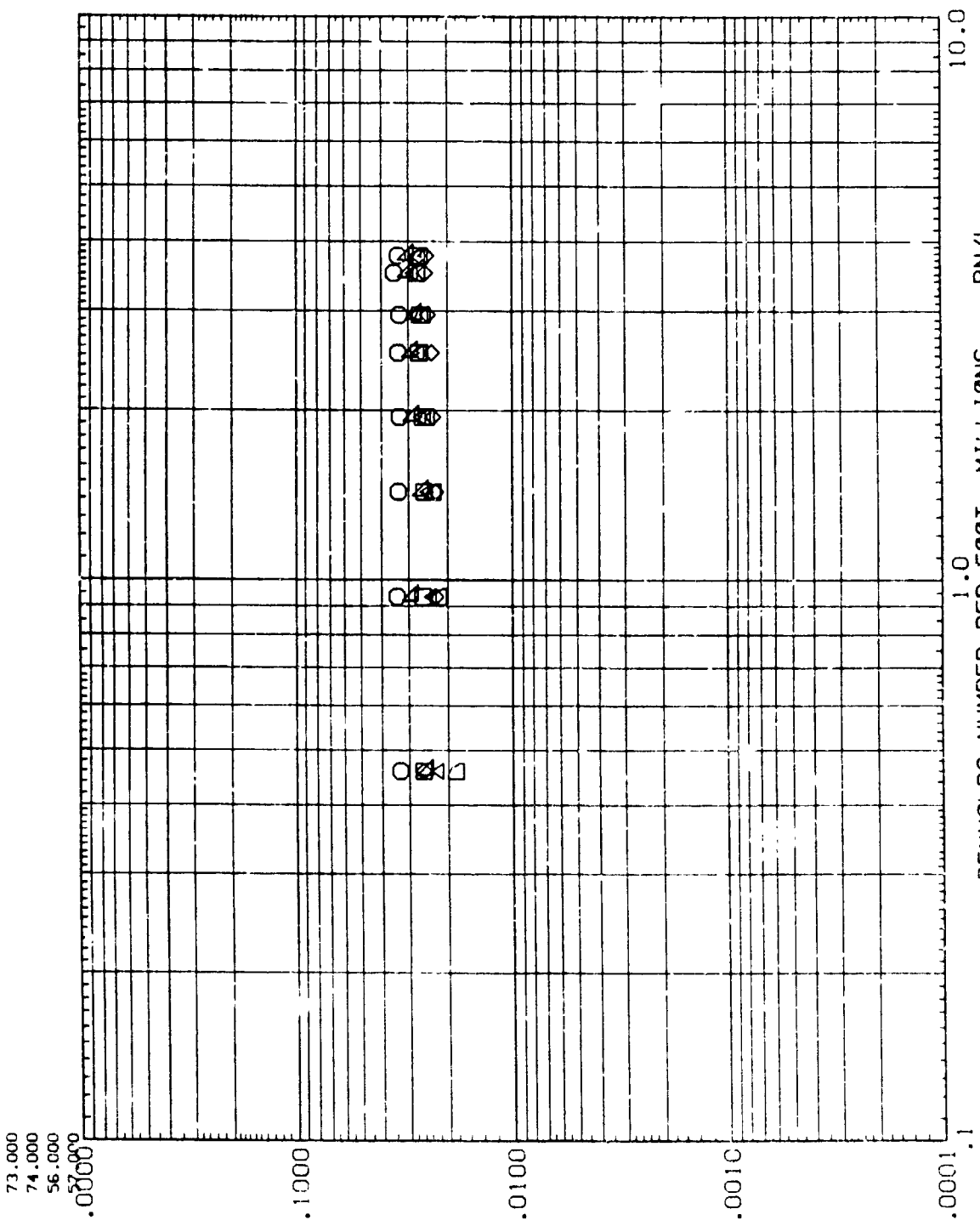


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/REF

OH-74 (AEDC /41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	.000	MACH	8.000
	58.000	4.000	39.790	ELEVON	.000	RUDDER	.000
	59.000						
	60.000						
	61.000						
	62.000						

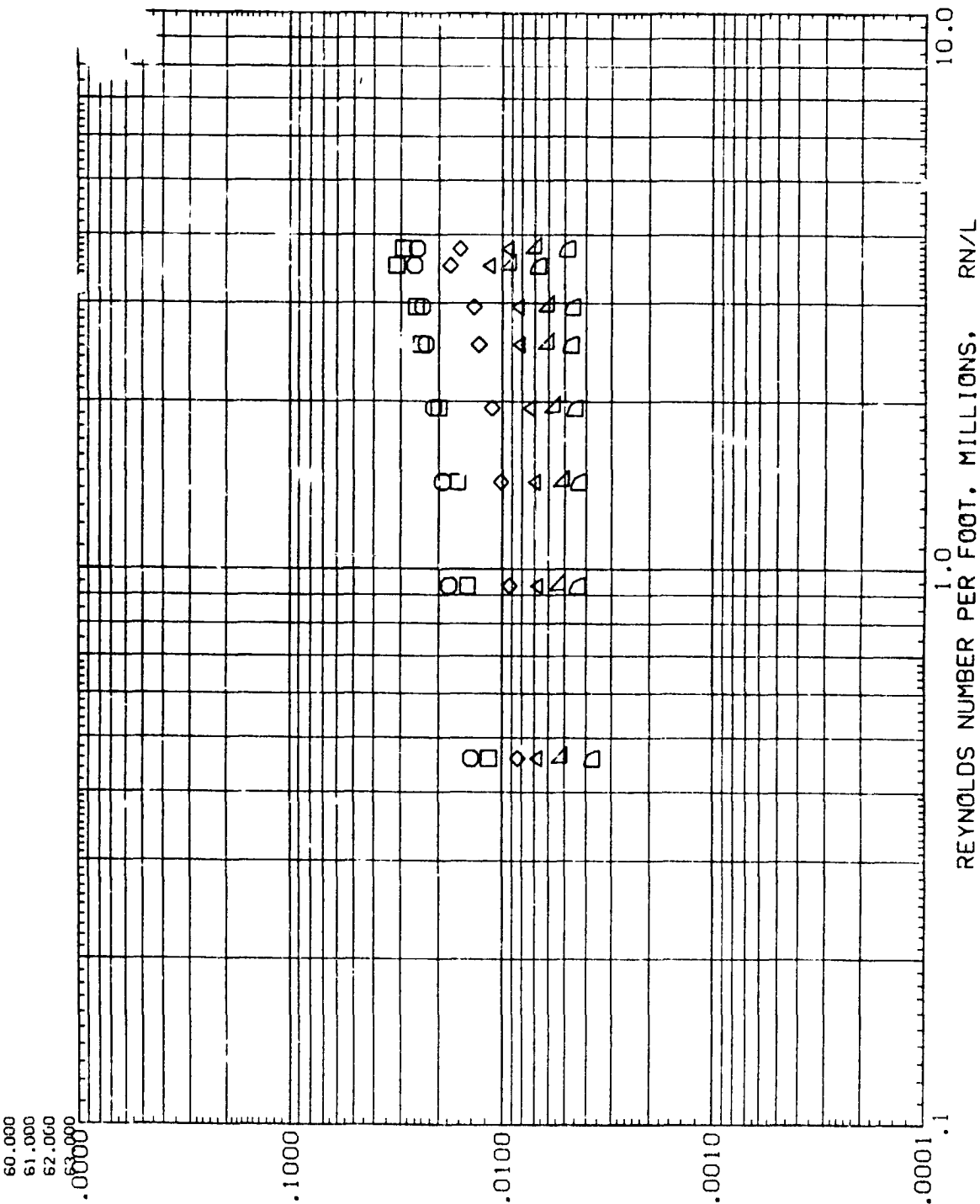
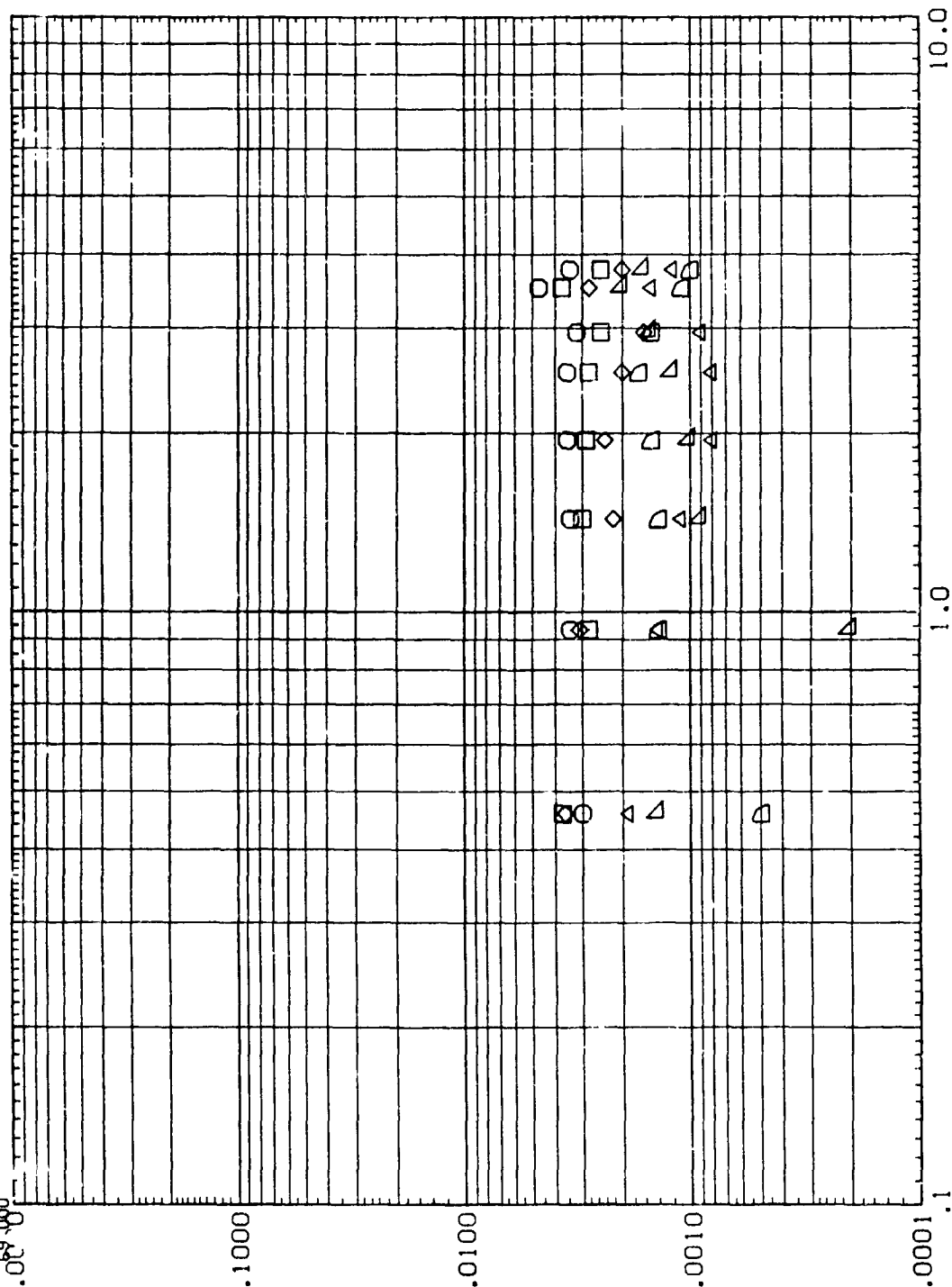


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

OH-74 (AEDC V413-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	PARAMETRIC VALUES			
				BETA	ELEVON	MACH	RUDDER
□	64.000	4.000	39.790	.000	.000	8.000	.000
◇	65.000						
△	66.000						
▽	67.000						
▽	68.000						
▽	69.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF



REYNOLDS NUMBER PER FOOT. MILLIONS. RN/L

FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB00C1)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	PARAMETRIC VALUES
○	70.000	4.000	39.790	.000	MACH
◇	75.000			.000	RUDDER
△	76.000				
▽	77.000				
□	78.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

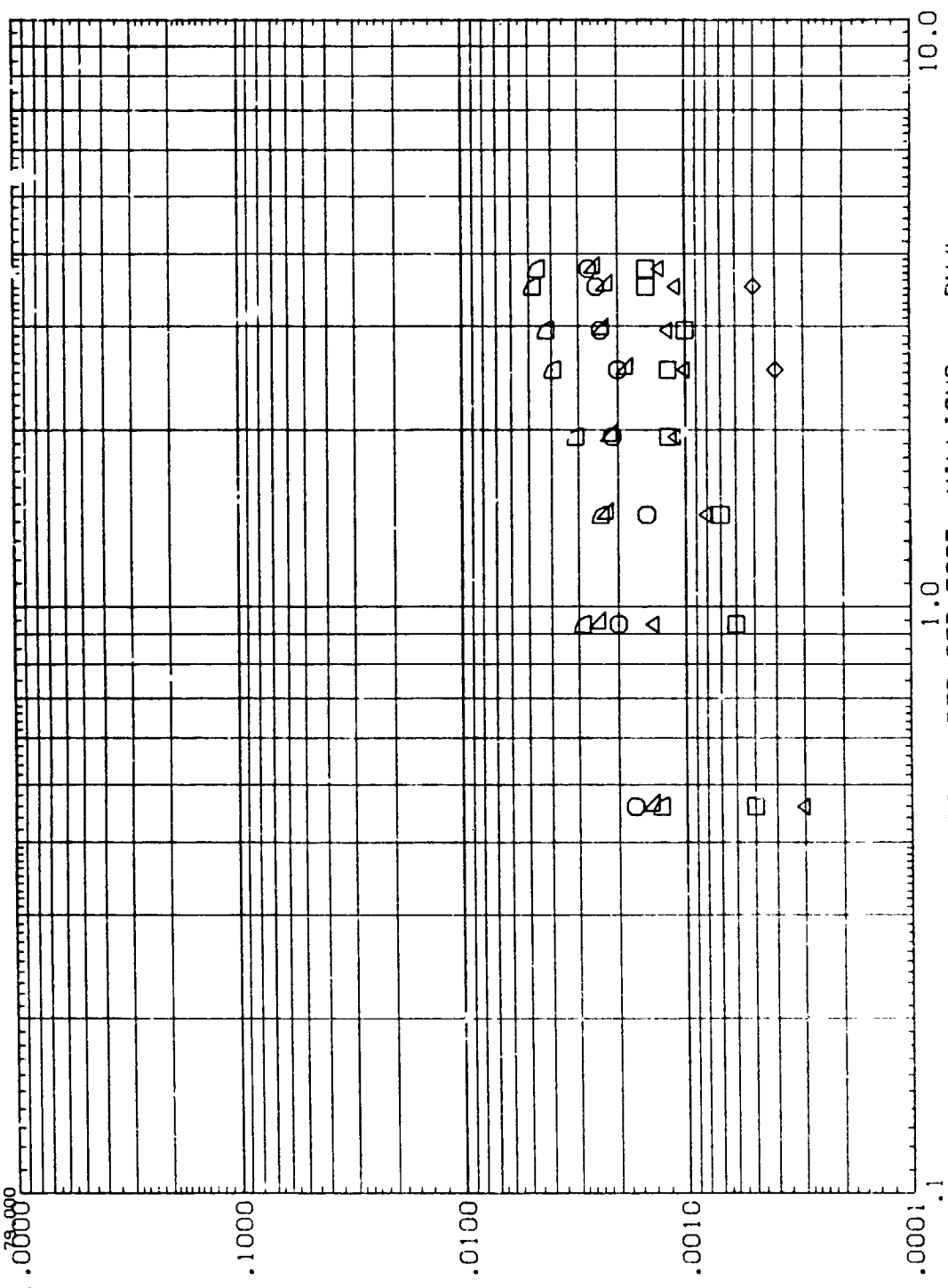


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

REPRODUCIBILITY OF THE ORIGINAL FIG 4 IS FOUR

GH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C	TRACE	ALPHA	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
O	80.000	4.000	39.790	.000	.000	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

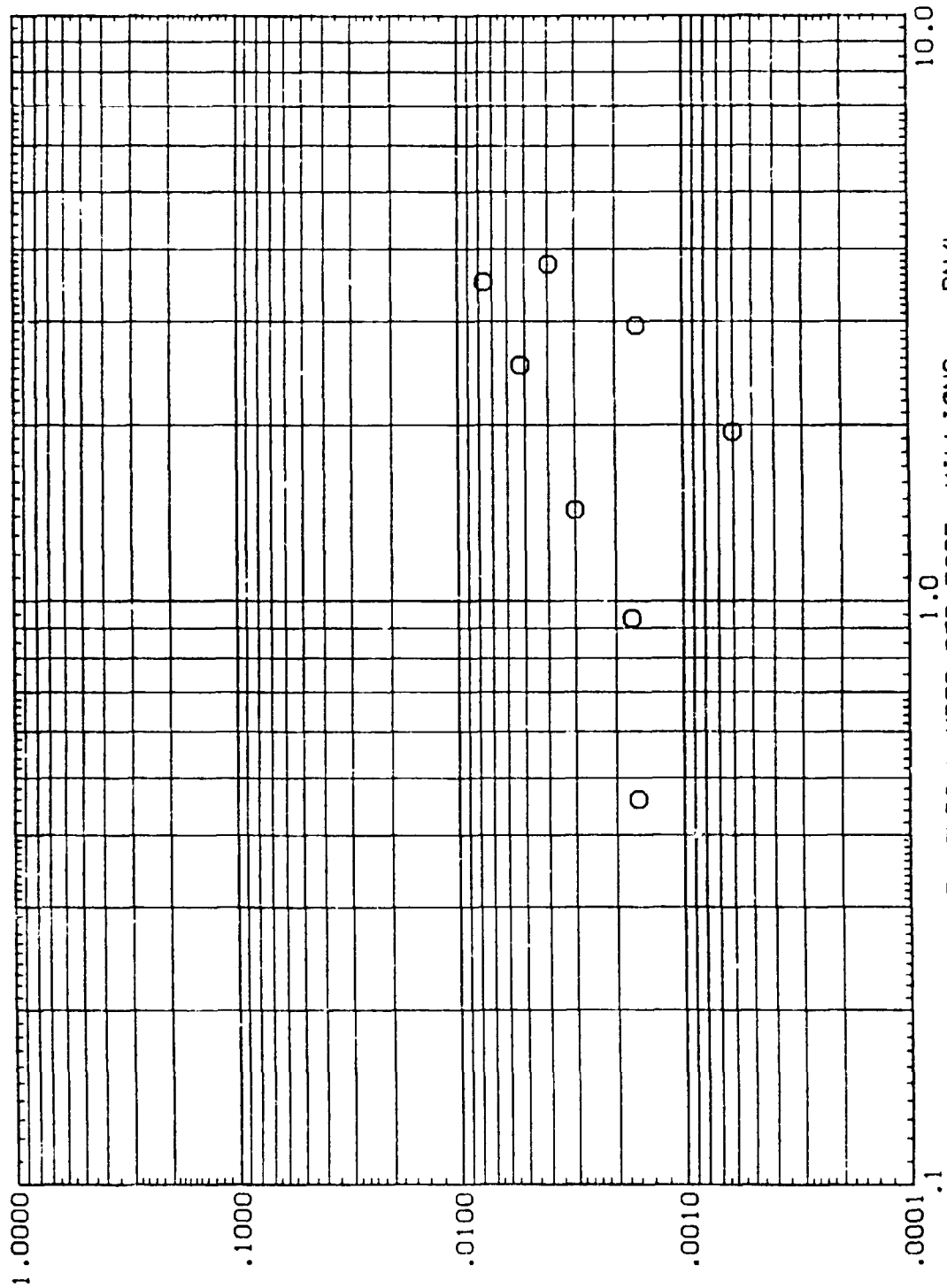


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL T/C NO TRACE ALPHA
 71.000 4.000 43.840
 72.000
 73.000
 74.000
 56.000

PARAMETRIC VALUES
 .000 MACH 8.000
 .000 RUDDER .000
 BETA
 ELEVON

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

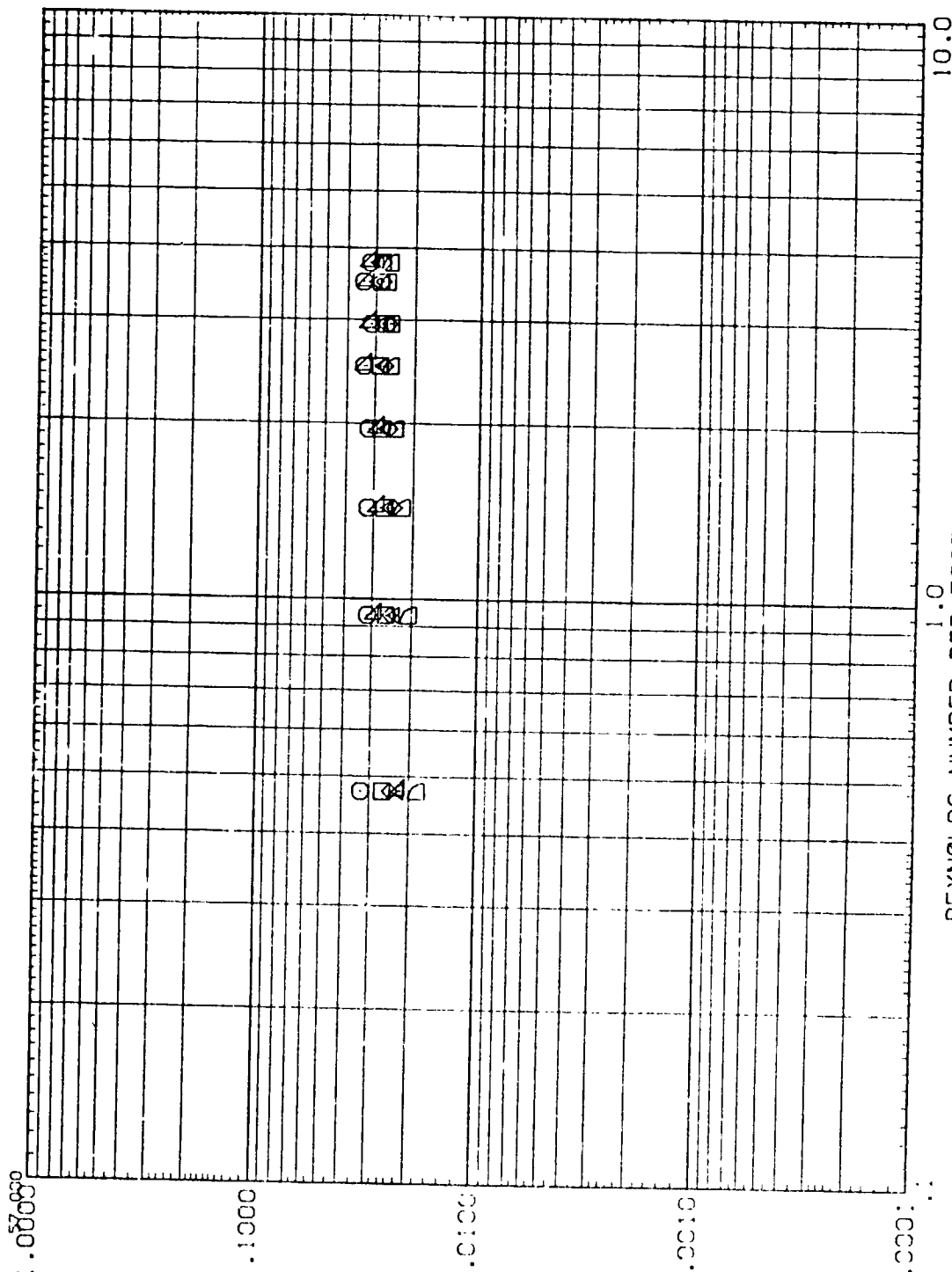


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

3H-74 (AEDC V41B-58A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL	T/C NO	TRACE	ALPHA	BETA	PARAMETRIC VALUES
○	58.000	4.000	43.840	ELEVON	.000
◇	59.000			MACH	.000
△	60.000			RUDDER	.000
□	61.000				
◇	62.000				
◇	63.000				

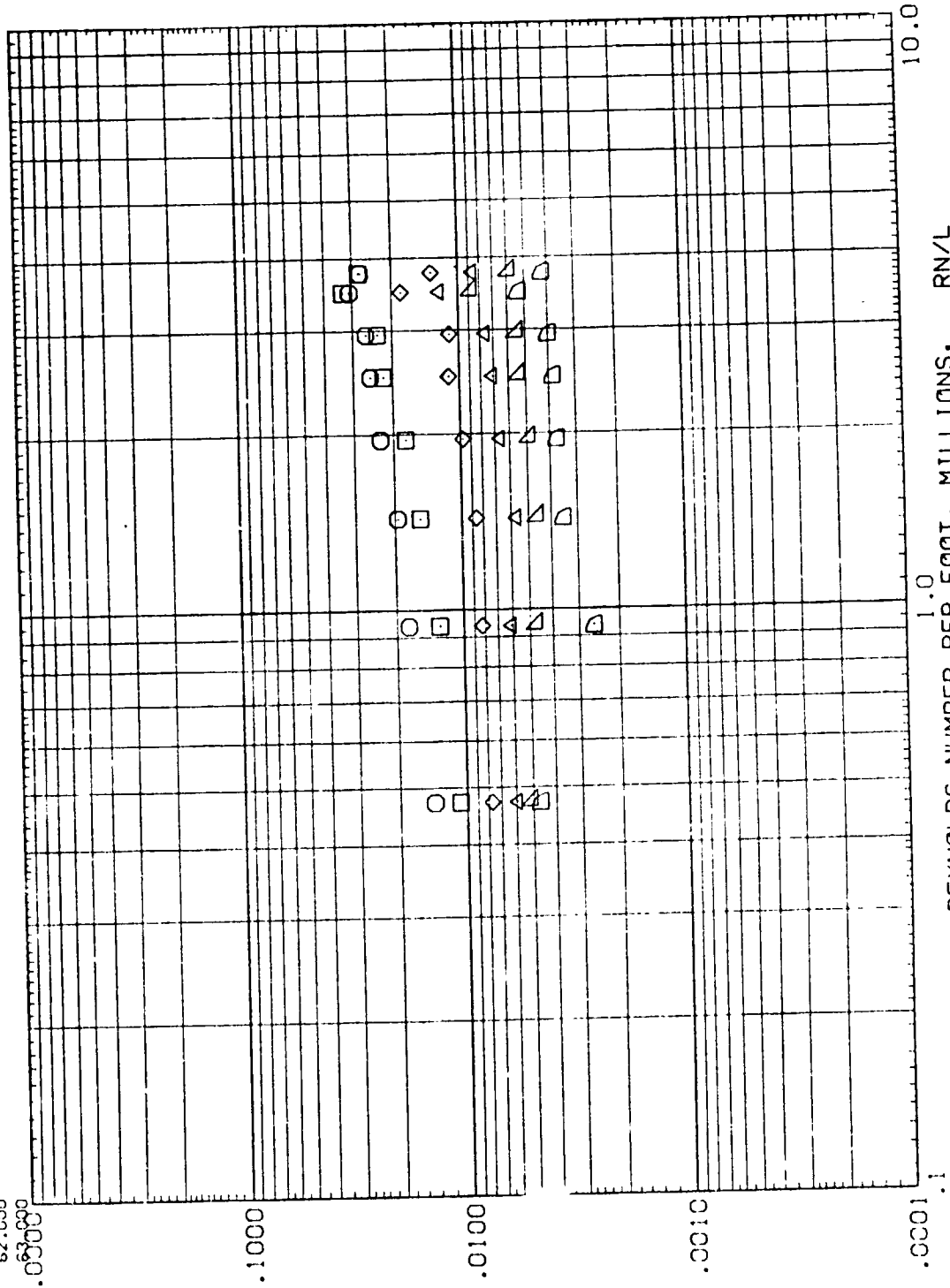


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

SYMBOL T/C NO TRACE ALPHA
 64.000 4.000 43.840
 65.000
 66.000
 67.000
 68.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

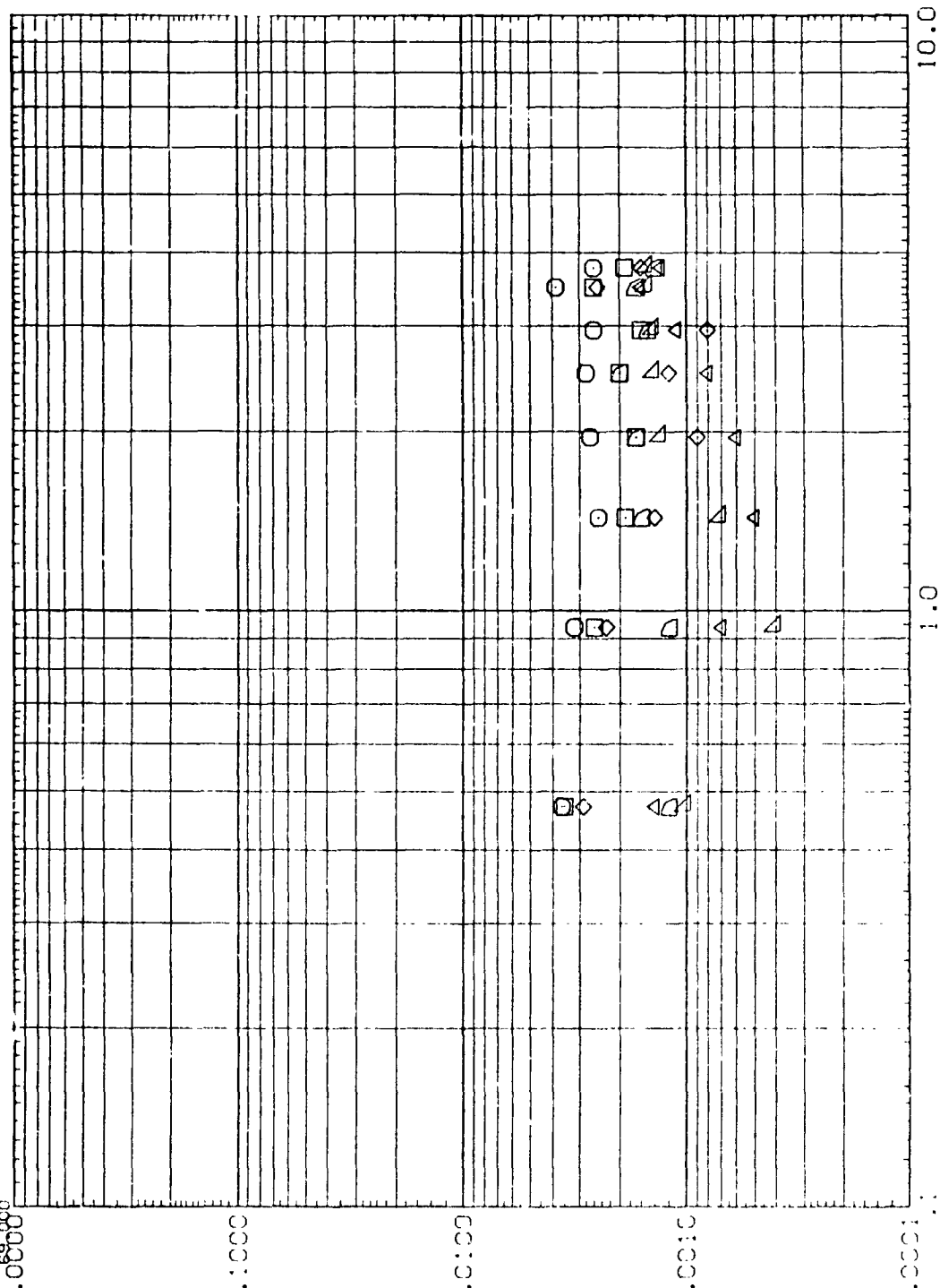


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

QH-74 (AEDC V41B-R8A) B62C12F10M16W127E52V8R19 (SVB001)

PARAMETRIC VALUES
 .000 MACH
 .000 RUDDER
 8.000

BETA
 ELEVON

TRACE ALPHA
 4.000 43.840

SYMBOL T/C NO
 70.000
 75.000
 76.000
 77.000
 78.000
 79.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

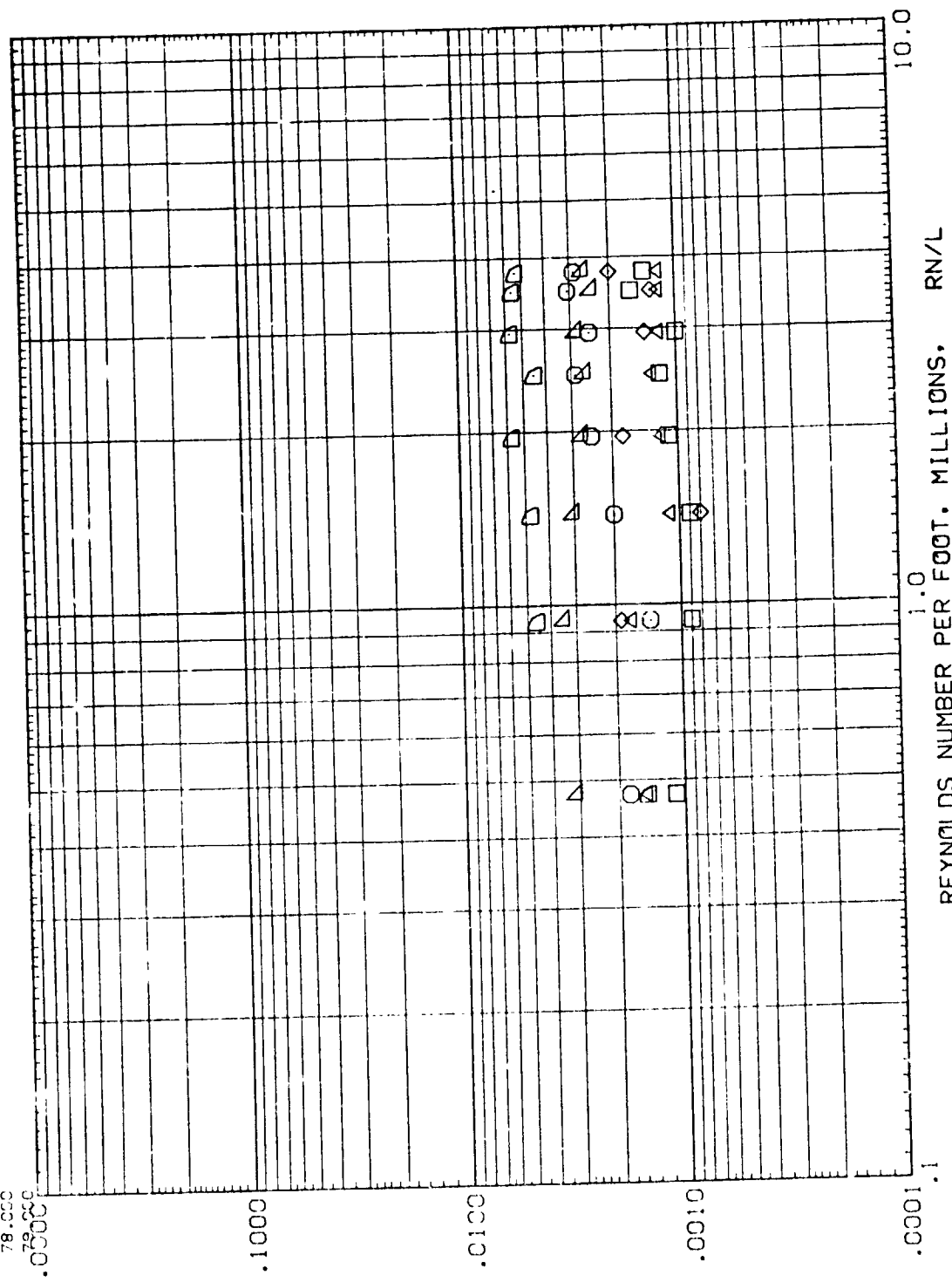


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C.S

GH-74 (AEDC V413-B8A) B62C12F10M16W127E52V8R19 (SVB001)

SYMBOL \bigcirc T/C NO 80.000 TRACE 4.000 ALPHA 43.840

PARAMETRIC VALUES
 .000 MACH
 .000 RUDDER
 BETA
 ELEVON

MEASURED TO THE 0.9 RECOVERY FACTOR, .9H/REF

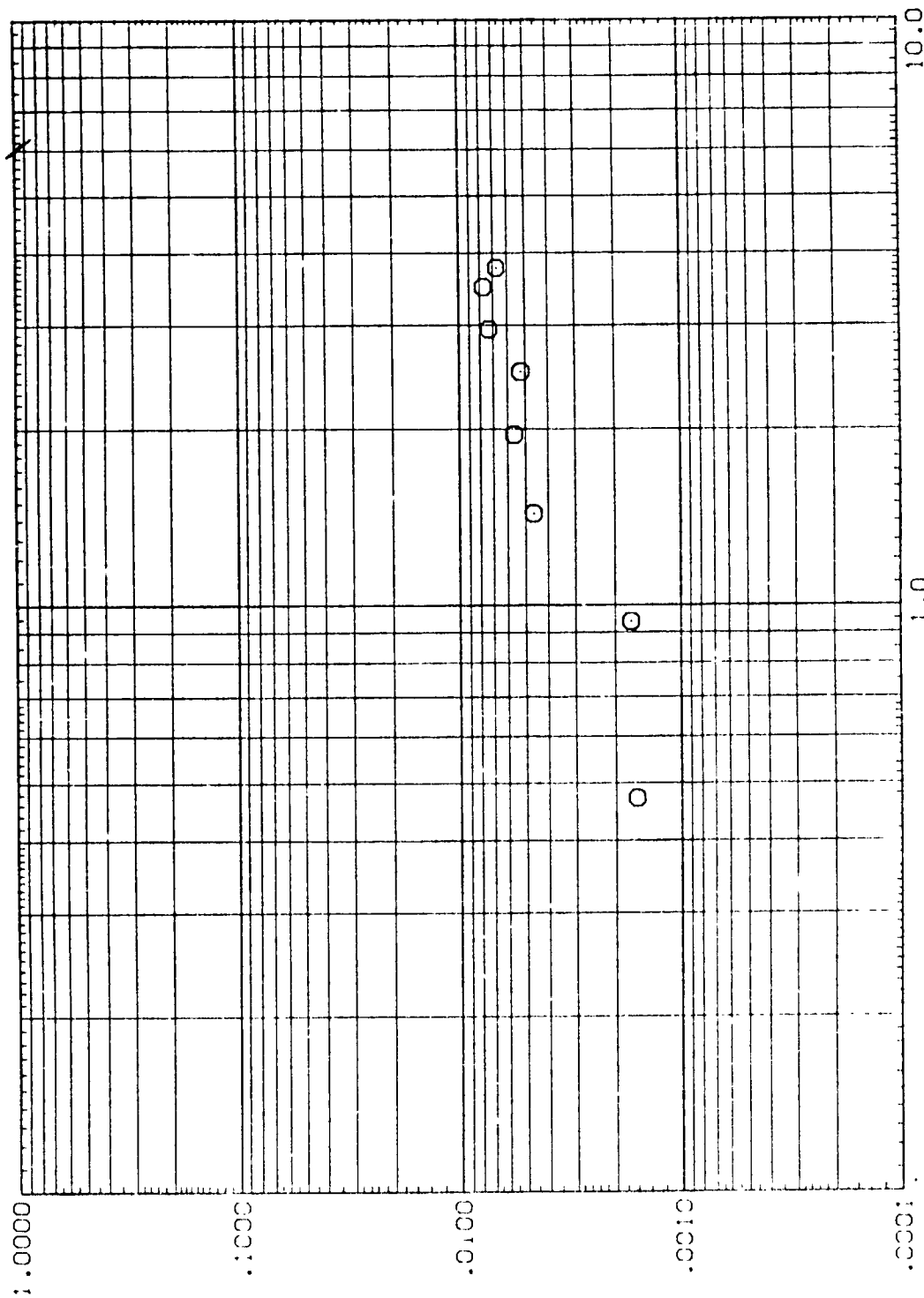


FIG. 27 HEAT TRANSFER COEFFICIENT RATIO VS. RN/L FOR TRACE LINE A/B T/C,S

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

T/C NO	TRACE	RN/L	PARAMETRIC VALUES			
			BETA	ELEVON	.000	.000
1.000	1.000	.467				
2.000						
3.000						
4.000						
5.000						
6.000						

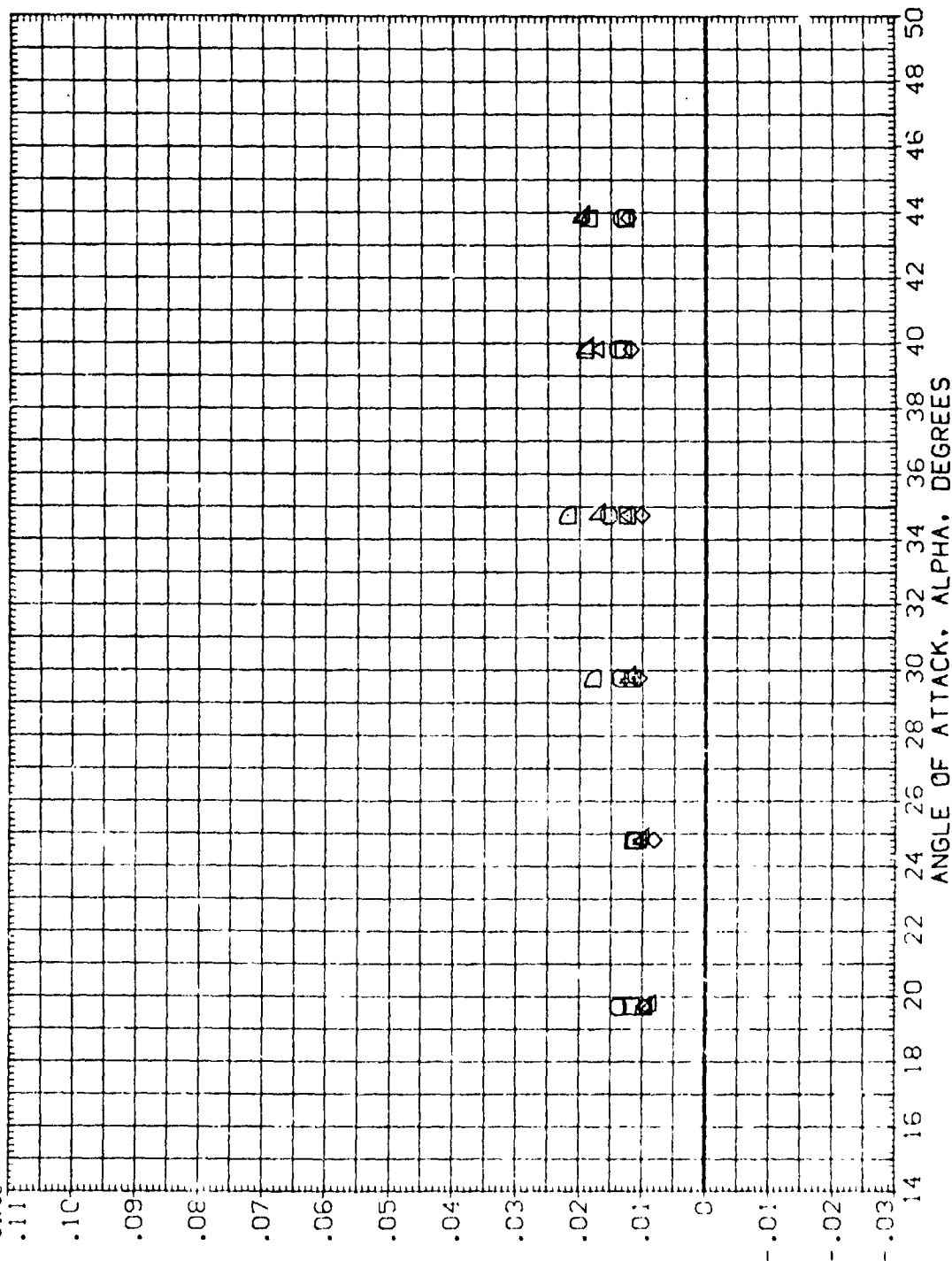


FIG. 28 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (UPPER TANGENT TRACE T/C.S)

MEASURED TO THEO. HEAT RECOVERY FACTOR, .9H/HREF

MEASURED TO T/C, HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

QH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

T/C NO TRACE RN/L
7.000 1.000 .467
8.000
9.000
10.000
11.000
12.000

SYMBOL
□◇○△

PARAMETRIC VALUES
BETA .000 MACH 8.000
ELEVON .000 RUDDER .000

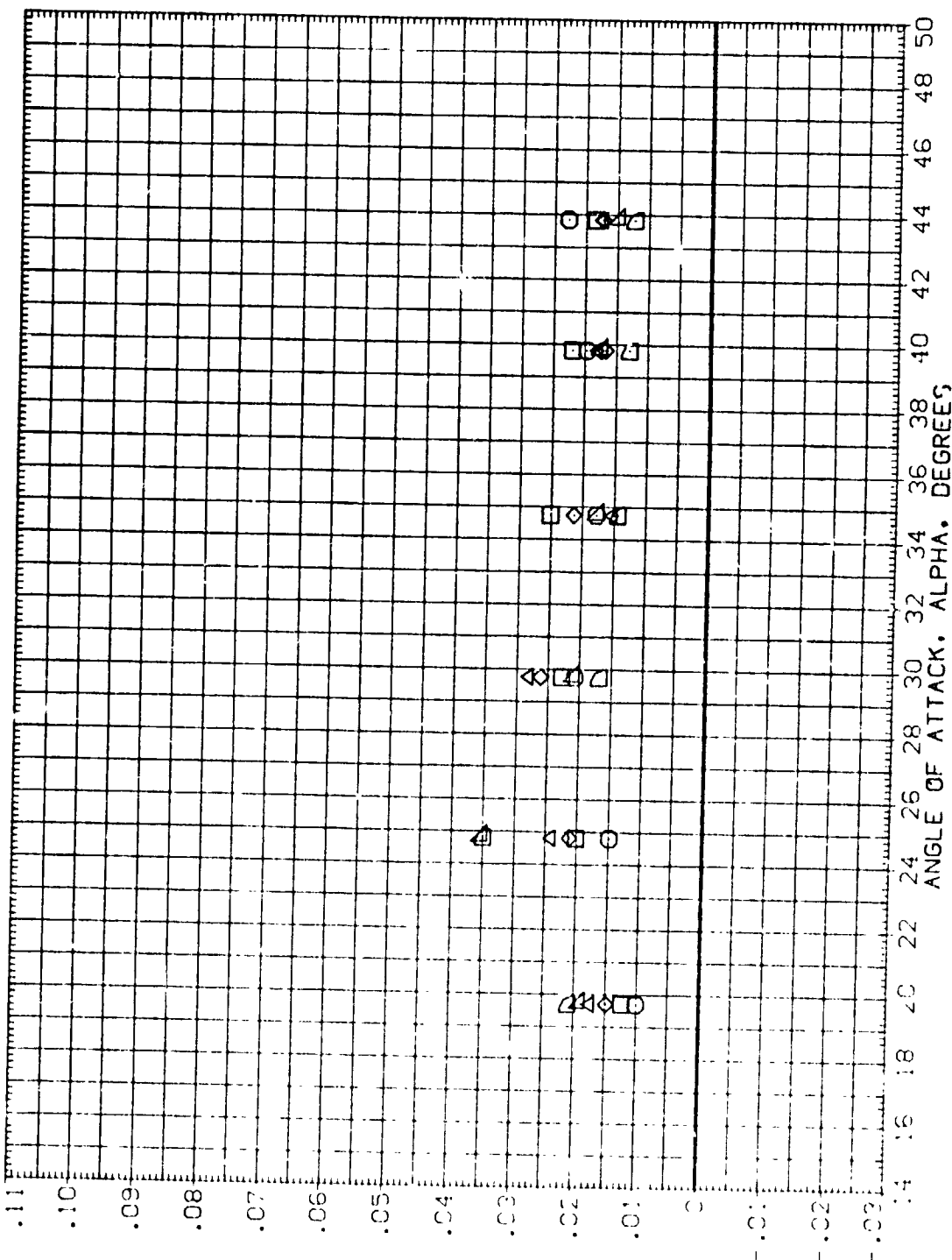


FIG. 28 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (UPPER TANGENT TRACE T/C,S)

CH-74 (AEDC V41B-88A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	T/C NO	FACE	RN/L	PARAMETRIC VALUES
◇	13.000	1.000	.467	BETA .000 MACH 8.000
◇	14.000			ELEVON .000 RUDDER .000
◇	15.000			
◇	16.000			
◇	17.000			

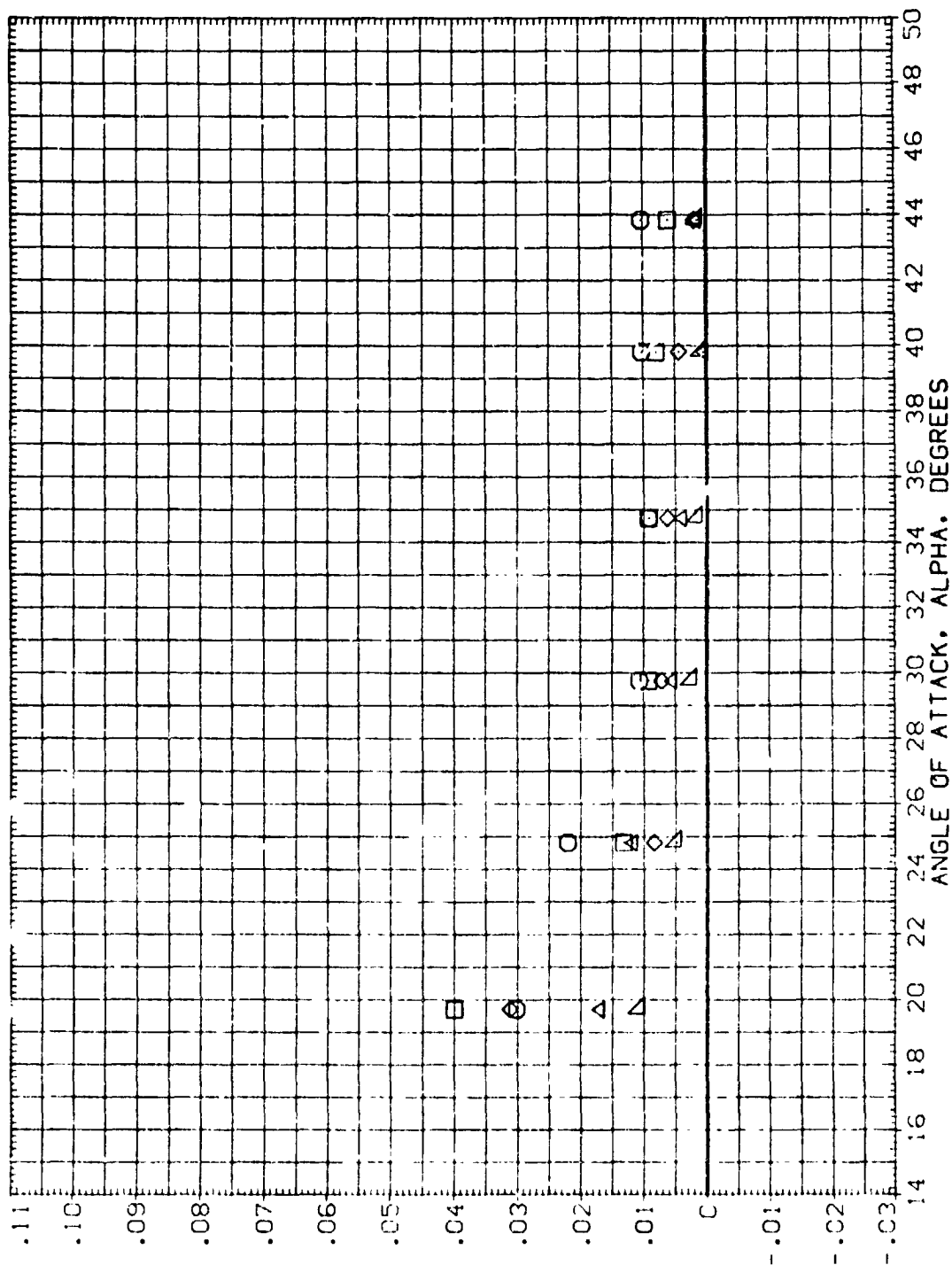


FIG. 28 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (UPPER TANGENT TRACE T/C.S)

CH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
 .000 MACH 8.000
 .000 RUDDER .000
 BETA ELEVON

T/C NO TRACE RN/L
 18.000 2.000 .467
 19.000
 20.000
 21.000
 22.000
 23.000

SYMBOL
 □ ◇ ○ △

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/REF

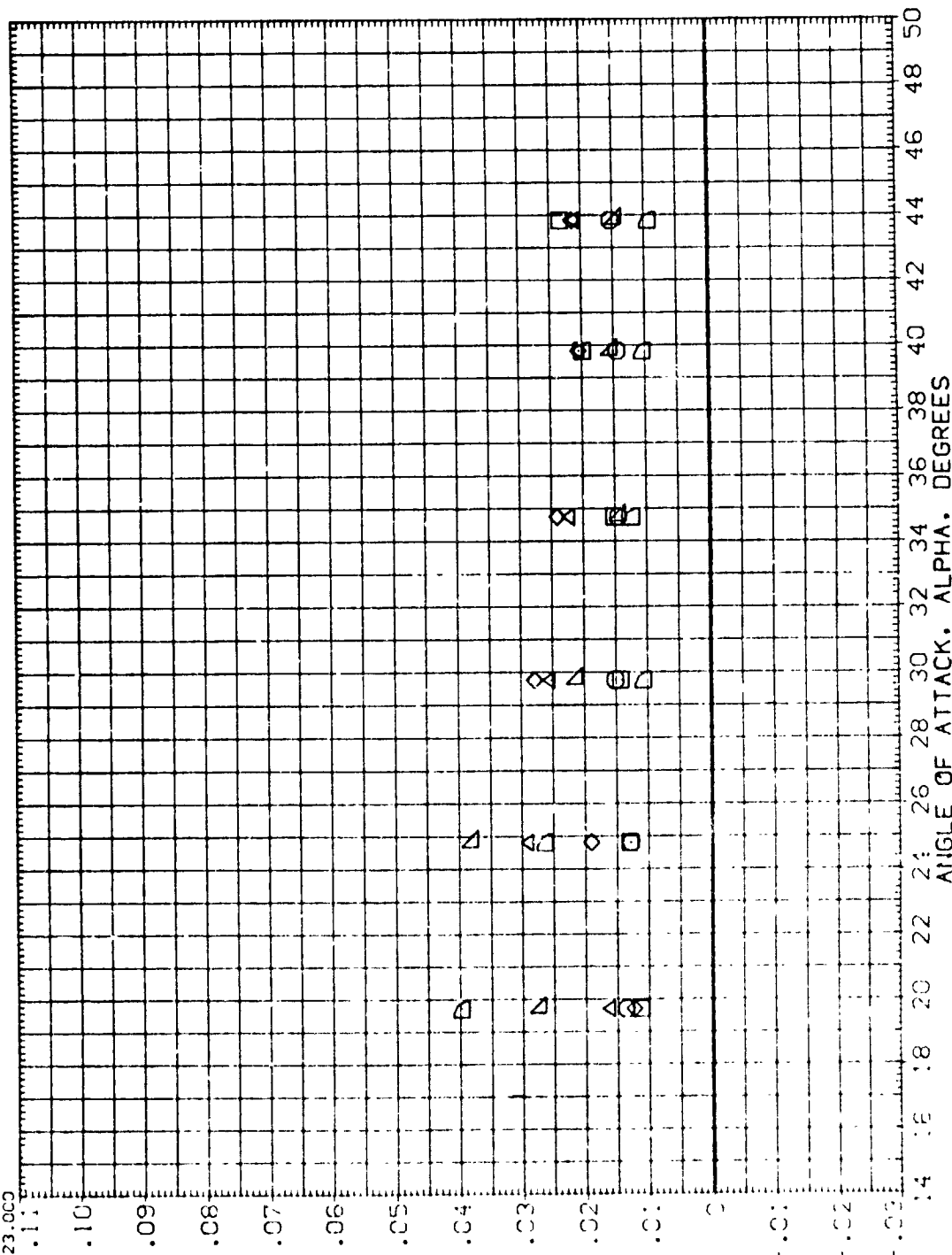


FIG. 29 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (HINGE LINE TRACE T/C,S)

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/PREF

SYMBOL
O

T/C NO 30.000
TRACE 2.000
RN/L .167

OH-74 (AEDC V41B-88A) B62C12F10M16W127E52V8R19 (QVB001)

PARAMETRIC VALUES
BETA .000 MACH 8.000
ELEVON .000 RUDDER .000

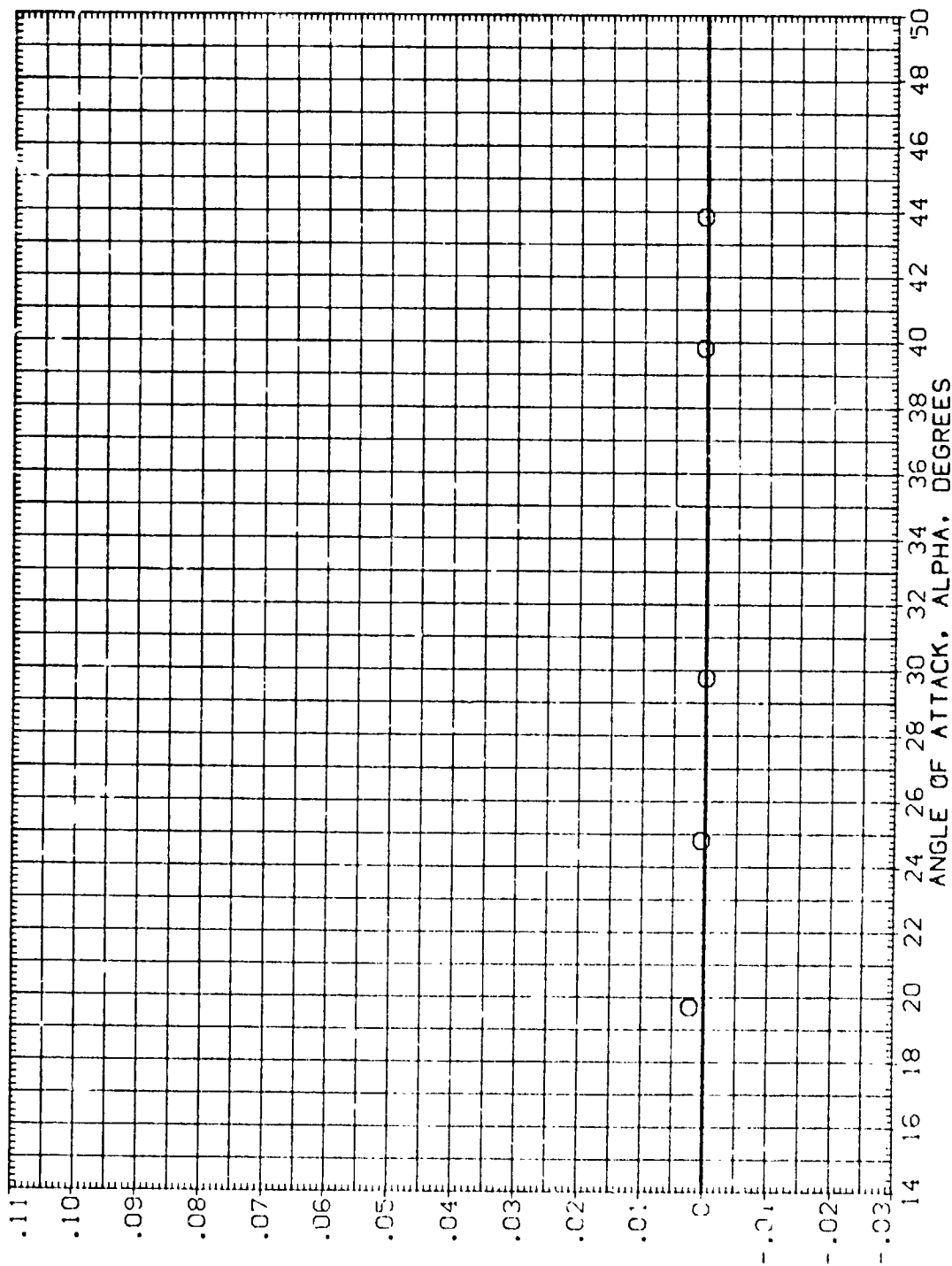


FIG. 29 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (HINGE LINE TRACE T/C, S)

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

QH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

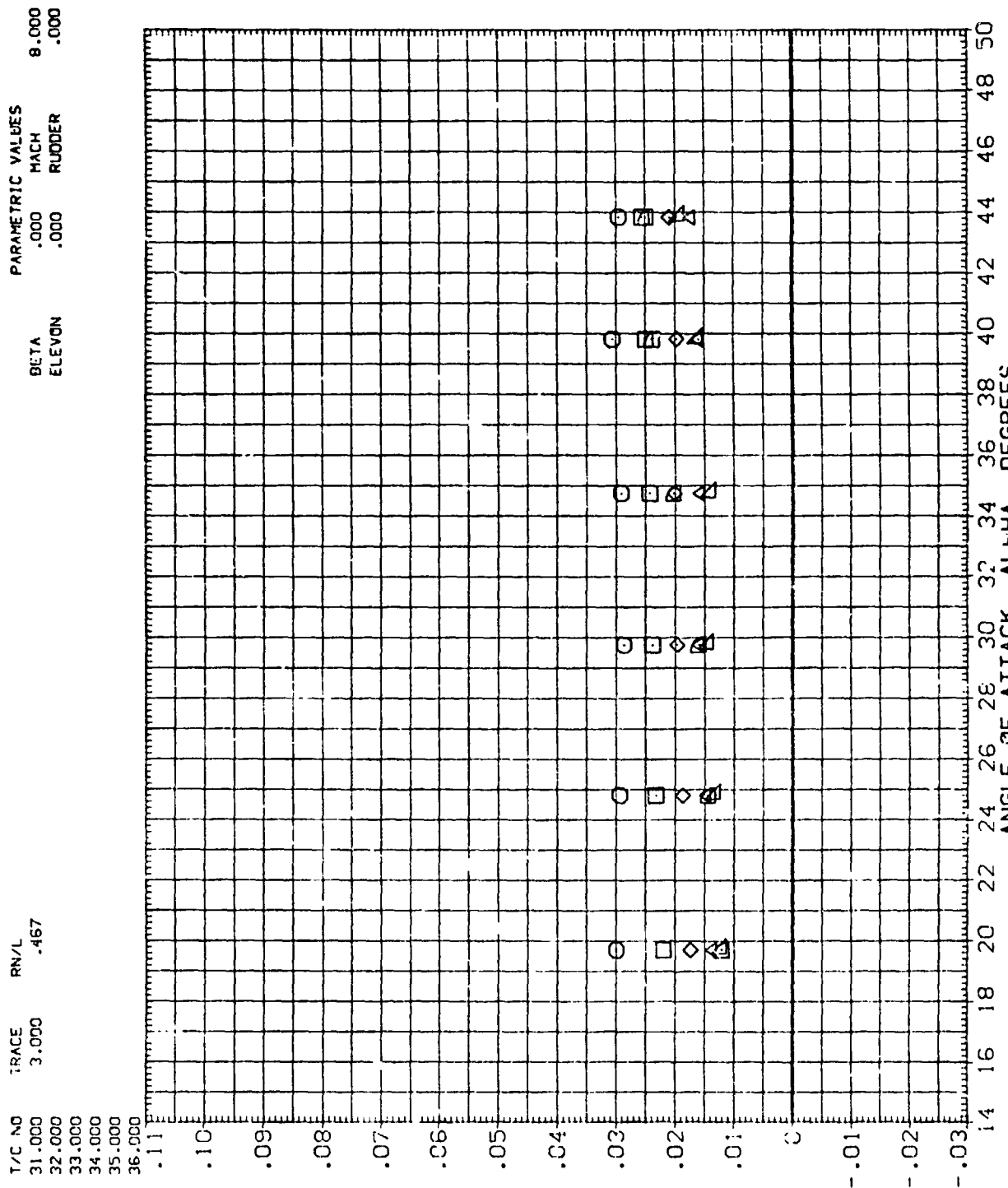


FIG. 30 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (W. L. 400 TRACE T/C,S)

OH-74 (AEDC V41B-88A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	T/C NO	TRACE	RN/L	PARAMETRIC VALUES			
				BETA ELEVON	.000 MACH	.000 RUDDER	.000
□	37.000	3.000	.467				
◇	38.000						
△	39.000						
▽	40.000						
○	41.000						
□	42.000						

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

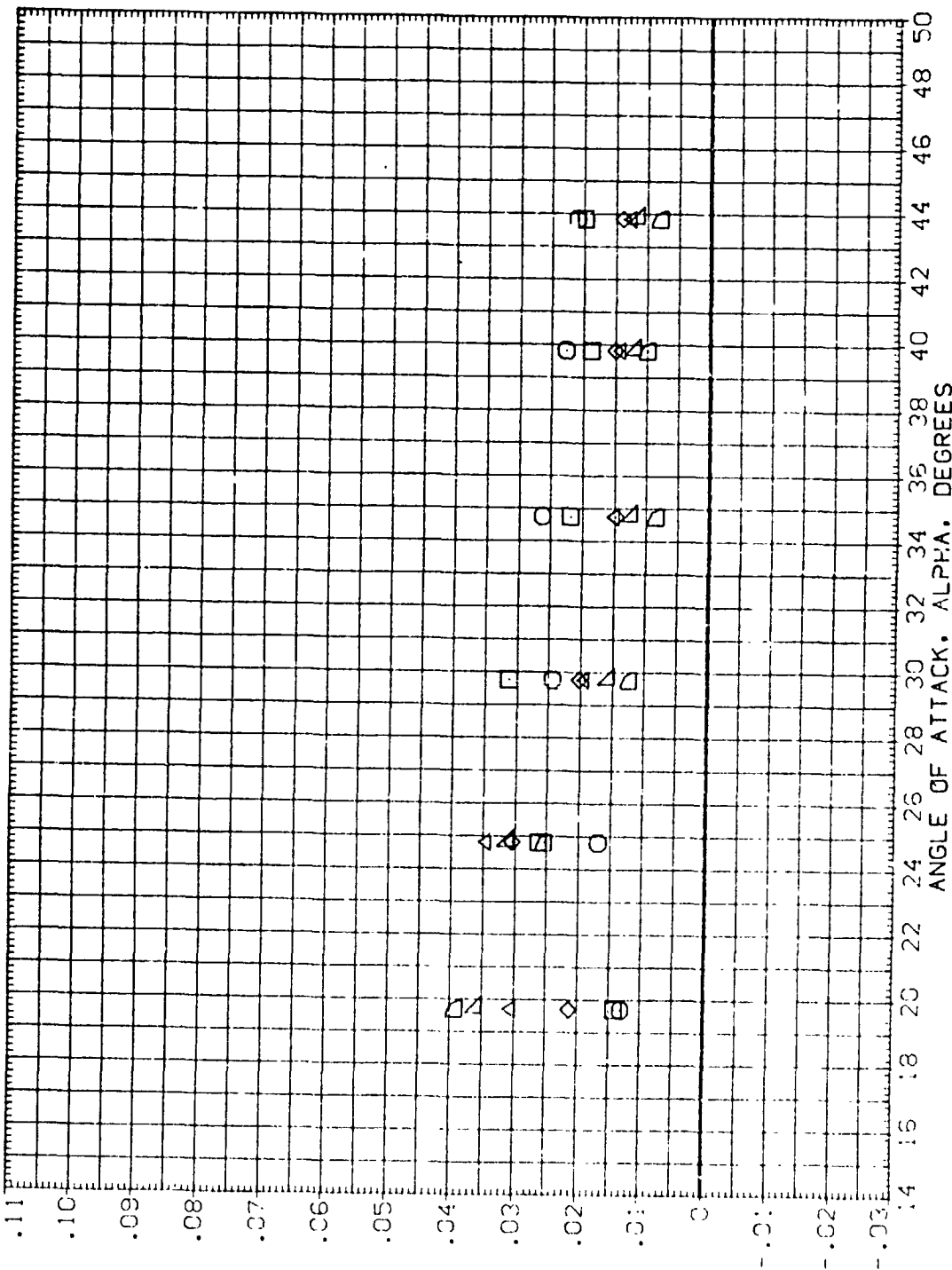


FIG. 1. HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (W. L. 400 TRACE T/C.S)

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (0VB001)

T/C NO	TR/LE	RN/L	PARAMETRIC VALUES		
			BETA	MACH	RUDDER
43.000	2.000	.467	.000	.000	.000
44.000			.000	.000	.000
45.000					
46.000					
47.000					
48.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

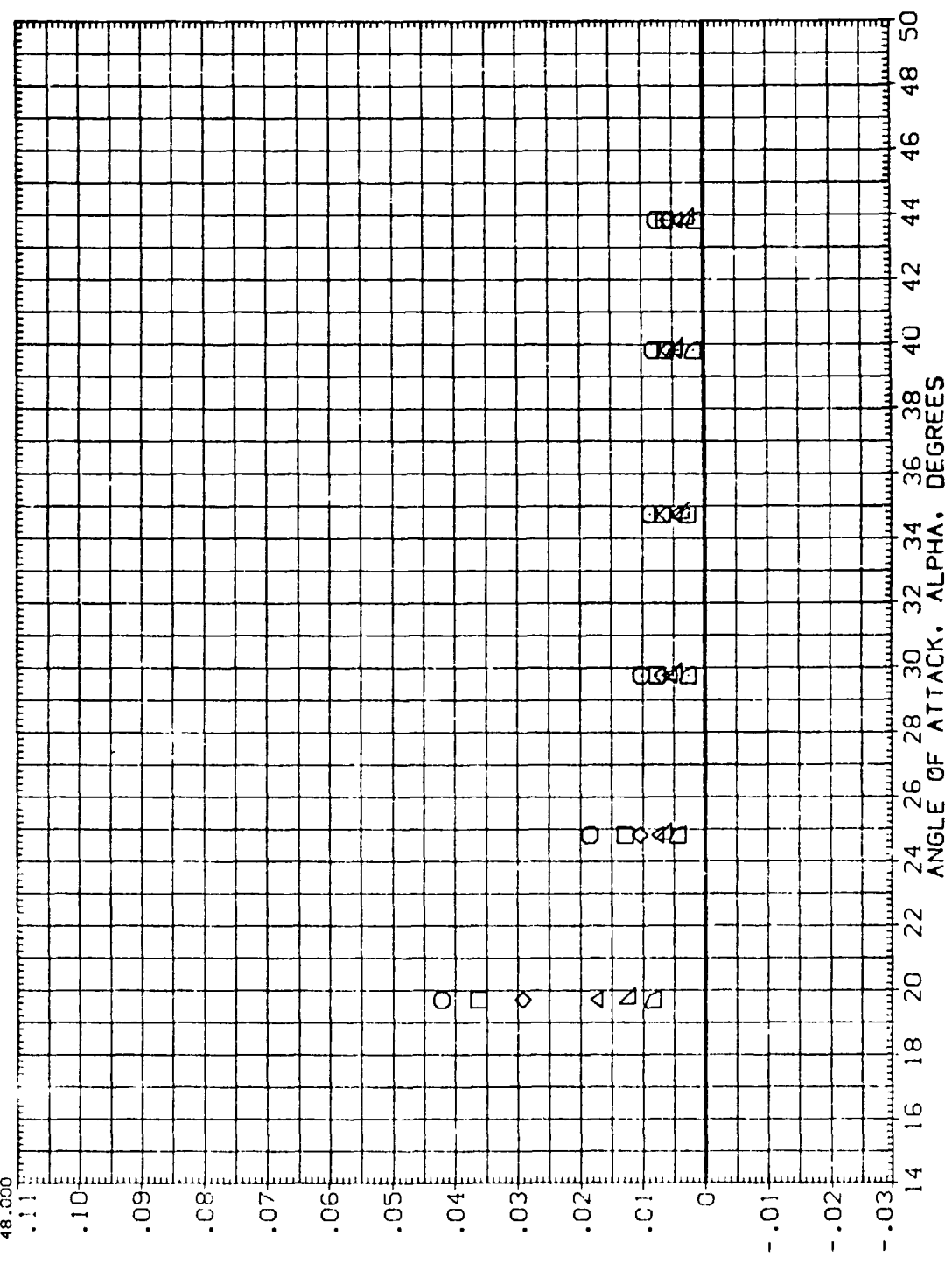


FIG. 30 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (W. L. 400 TRACE T/C,S)

CH-74 (AEDC V41B-B8A) B62C12F1Q1M16W127E52V8R19 (QVB001)

SYMBOL
 ○▽◇□

T/C NO TRACE RN/L
 49.000 3.000 .467
 50.000
 51.000
 52.000
 53.000
 54.000

PARAMETRIC VALUES
 BETA .000 MACH 8.000
 ELEVON .000 RUDDER .000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

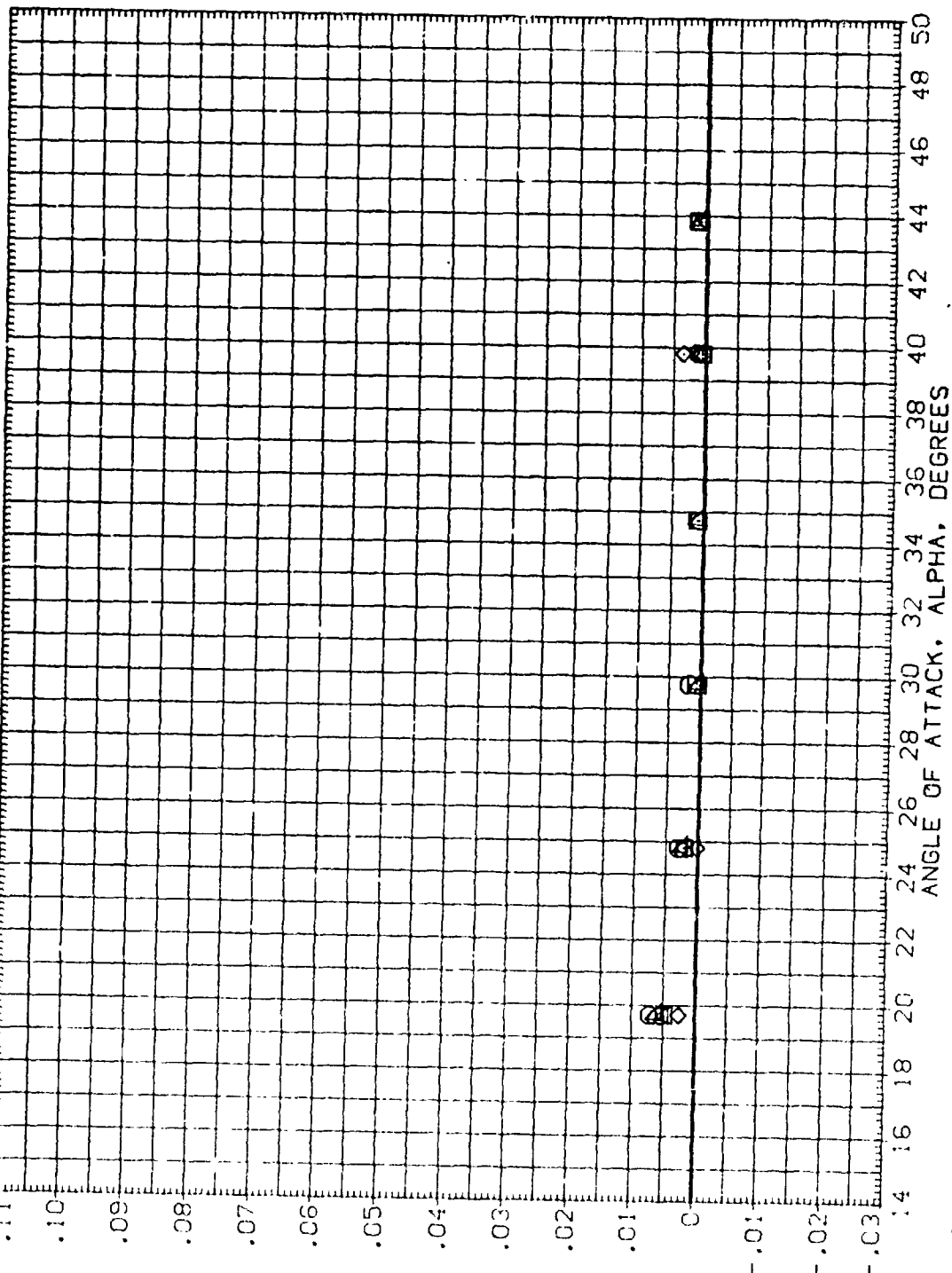


FIG. 30 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (W. L. 400 TRACE T/C, S)

0H-74 (AEDC V41B-38A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	T/C NO	TRACE	RN/L	BETA	PARAMETRIC VALUES	8.000
O	55.000	3.000	.467	ELEVON	.000	.000
					MACH	
					RUDDER	

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

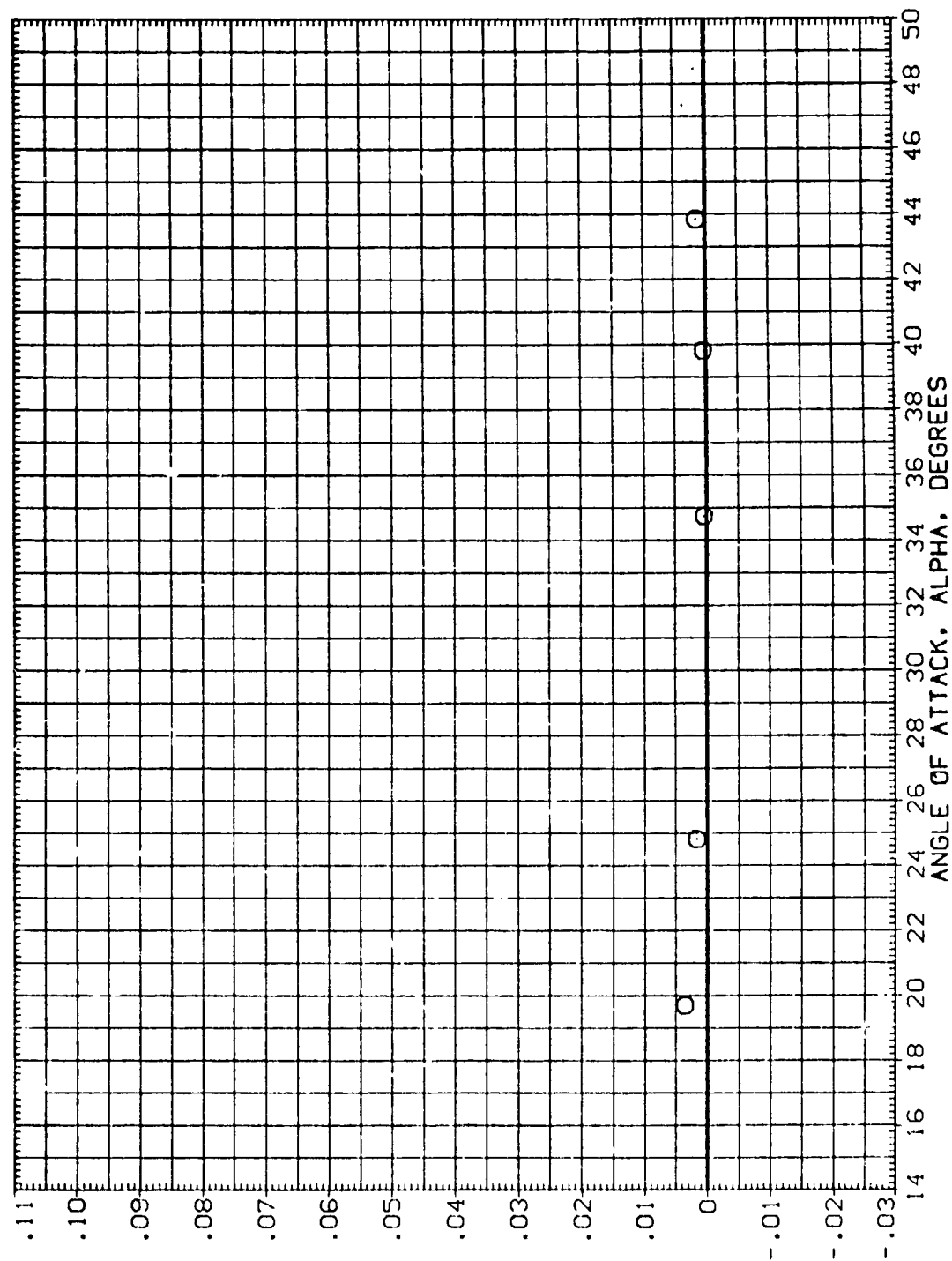


FIG. 30 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (W. L. 400 TRACE T/C,S)

CH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	T/C NO	TRACE	RN/L	PARAMETRIC VALUES		
				BETA	MACH	RUDDER
□	71.000	4.000	.467	.000	8.000	.000
◇	72.000			.000		
△	73.000					
▽	74.000					
▽	56.000					
▽	57.000					

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR, .9H/HREF

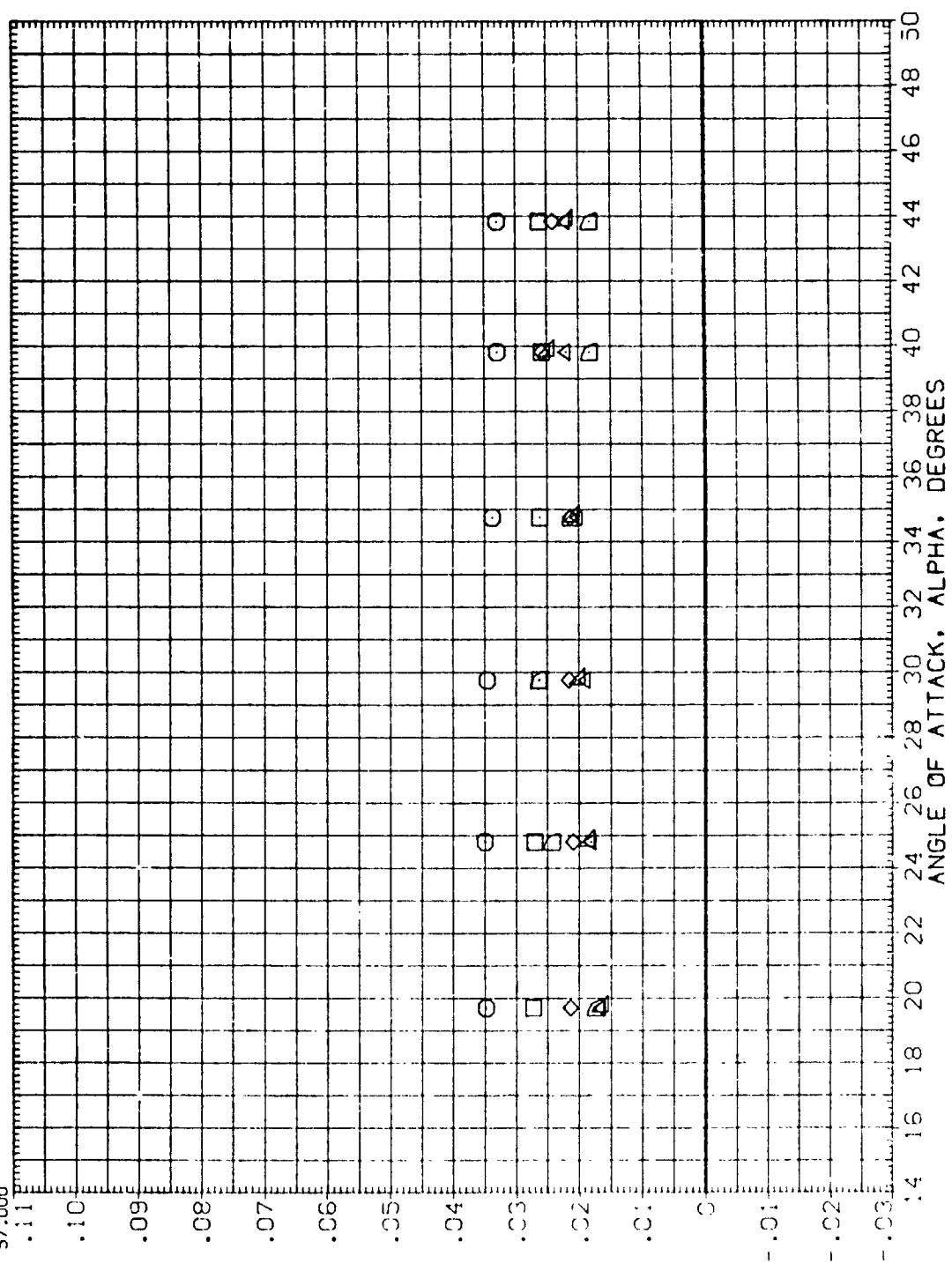


FIG. 31 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (TRACE LINE A/B T/C,S)

C

T/C NO	TOTAL	RN/L
58.000	4.000	.467

PARAMETRIC VALUES	
.000	HACK
.000	RUDDER

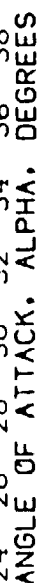


FIG. 31 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (TRACE LINE A/B T/C,S)

0H-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

T/C NO	TRACE	RN/L	BETA	PARAMETRIC VALUES
64.000	4.000	.467	.000	.000 MACH
65.000			.000	.000 RUDDER
66.000				
67.000				
68.000				
69.000				

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

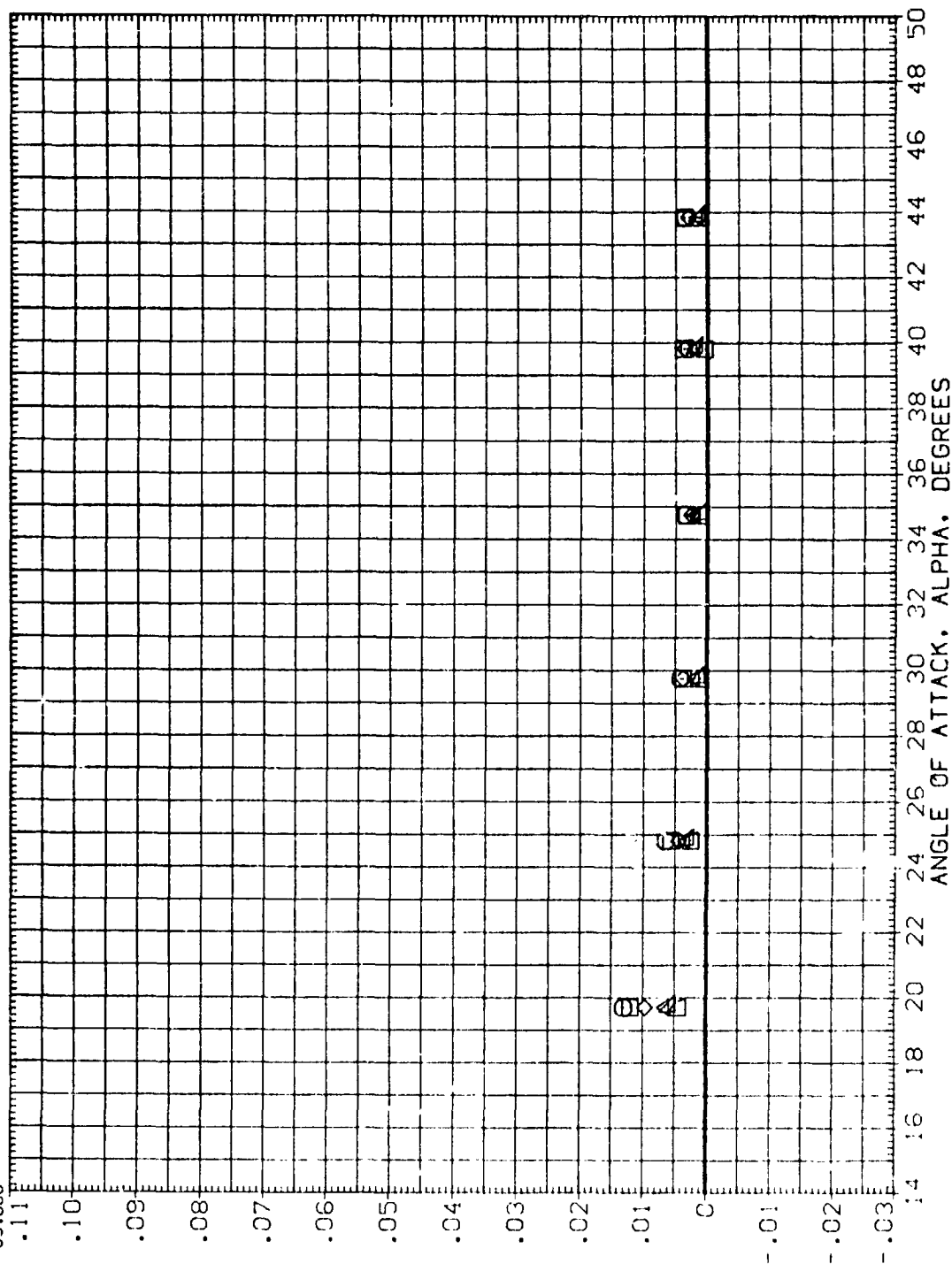


FIG. 31 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (TRACE LINE A/B T/C.S)

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

T/C NO	TRACE	RN/L	BETA	PARAMETRIC VALUES	B.000
70.000	4.000	.467	ELEVON	MACH	.000
75.000				RUDDER	.000
76.000					
77.000					
78.000					
79.000					

SYMBOL
 □◇◇◇
 ▽▽▽▽

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. .9H/HREF

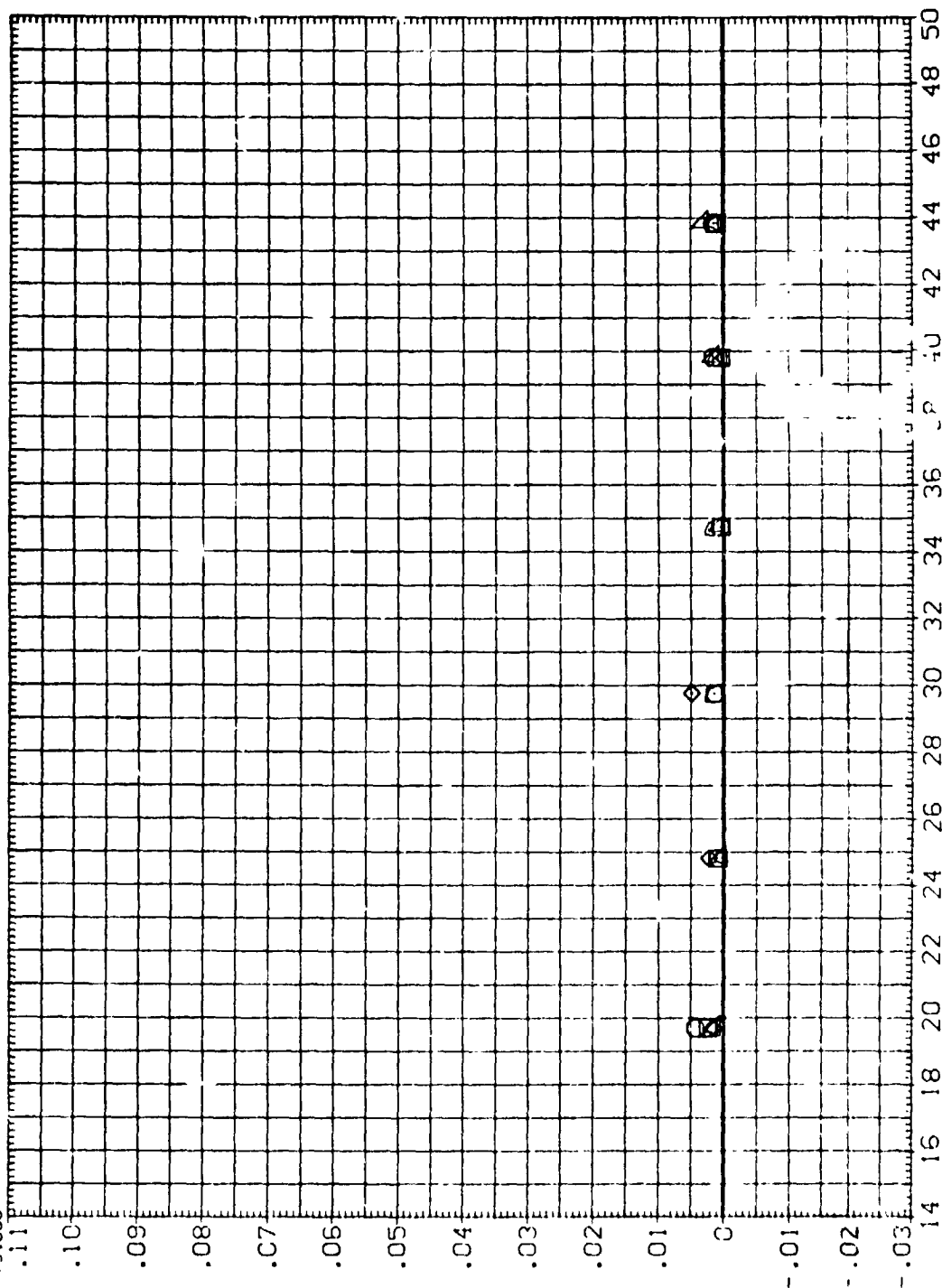


FIG. 31 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (TRACE LINE A/B T/C.S)

CH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19 (QVB001)

SYMBOL	T/C NO	TRACE	RN/L	PARAMETRIC VALUES		
○	80.C70	4.000	.467	BETA	MACH	8.000
				ELEVON	RUDDER	.000

MEASURED TO THEO. HEAT TRANSFER RATIO AT .9 RECOVERY FACTOR. 9H/HREF

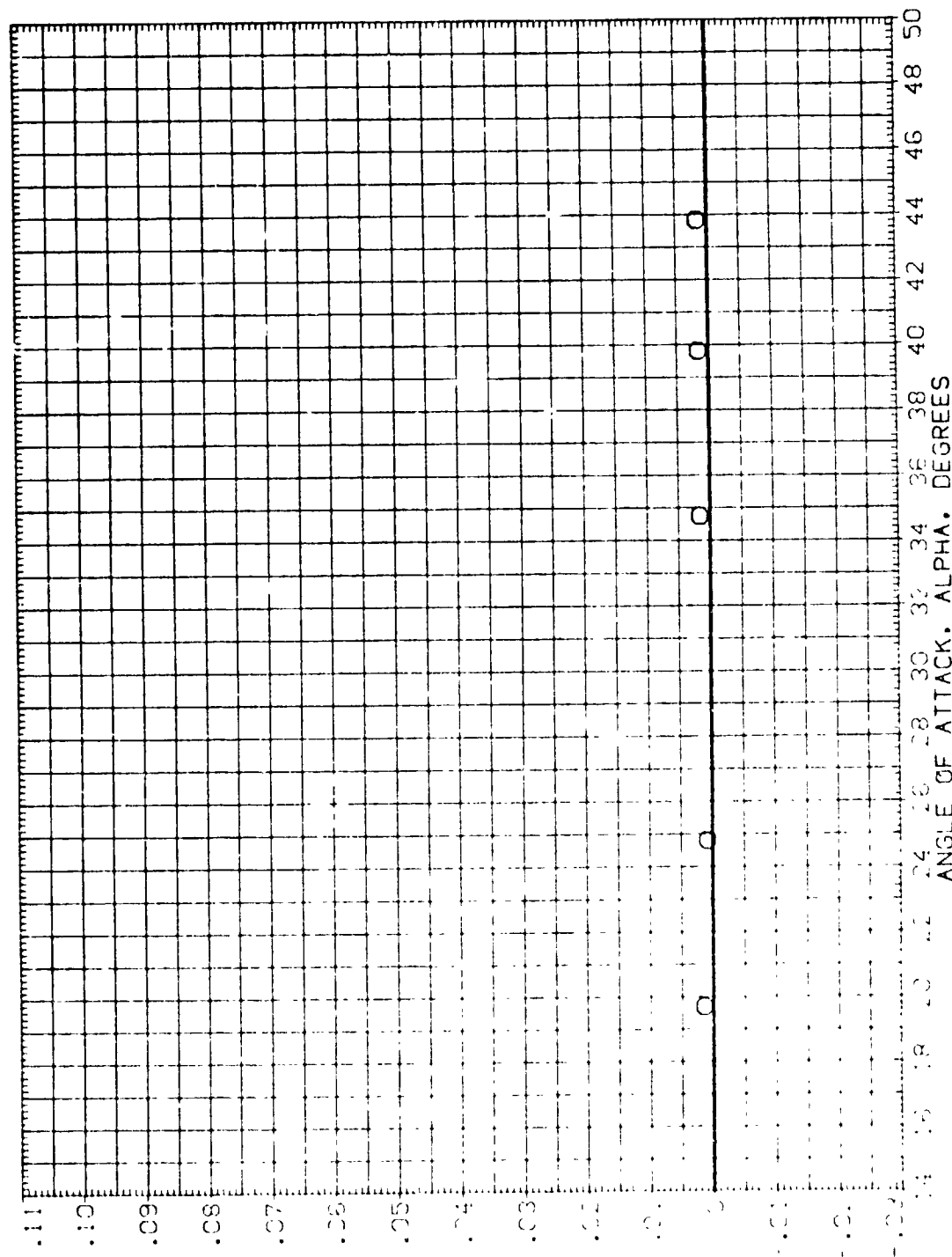


FIG. 31 HEAT TRANSFER COEFFICIENT RATIO VS. ALPHA (TRACE LINE A/B T/C.S)

APPENDIX
TABULATED SOURCE DATA

Tabulations of plotted data are available on request from
Data Management Services

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	DEG. R	PSIA	Q PSIA	V FY/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
1	7.880	19.71	84.30	117.7	180.0	.0000	87.70	.1000-01	.4140	3616.	.9112-05	.7352-07

RUN NUMBER	RN/L X10 6	HT/REF BTU/ R FT2SEC	STN NO R=
1	.4666	.1553-01	.5934-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HT/REF R=0.9	H/HT/REF R=1.0	H/HT/REF R=TAW	H1GTO1 BTU/ R FT2SEC	H1COT1 BTU/ R FT2SEC	H1TAW1 BTU/ R FT2SEC	QDOT BTU/ FT2SEC	QDOT DEG R /SEC	TH DEG. R
1	1 0000	.27500	1.0000	.1390-01	.1140-01	.1570-01	.2165-03	.1765-03	.2441-03	.1120	1.168	539.7
1	1 0000	.30000	2.0000	.180-01	.9600-02	.1330-01	.1829-03	.1492-03	.2063-03	.9500-01	1.012	535.3
1	1 0000	.32500	3.0000	.9800-02	.8000-02	.1100-01	.1520-03	.1235-03	.1714-03	.7900-01	.8130	535.4
1	1 0000	.35000	4.0000	.9600-02	.7800-02	.1080-01	.1488-03	.1214-03	.1678-03	.7700-01	.8040	535.2
1	1 0000	.37500	5.0000	.8600-02	.7000-02	.9700-02	.1330-03	.1084-03	.1500-03	.6900-01	.7280	535.7
1	1 0000	.40000	6.0000	.9900-02	.8100-02	.1120-01	.1537-03	.1253-03	.1733-03	.8000-01	.8230	535.2
1	1 0000	.42500	7.0000	.1010-01	.8200-02	.1140-01	.1565-03	.1276-03	.1765-03	.8100-01	.8450	539.3
1	1 0000	.45000	8.0000	.1230-01	.1010-01	.1390-01	.1918-03	.1565-03	.2163-03	.1000+00	1.023	538.9
1	1 0000	.47500	9.0000	.1480-01	.1200-01	.1660-01	.2293-03	.1870-03	.2585-03	.1190	1.216	539.3
1	1 0000	.50000	10.000	.1730-01	.1410-01	.1950-01	.2687-03	.2191-03	.3030-03	.1400	1.418	539.2
1	1 0000	.52500	11.000	.1890-01	.1540-01	.2130-01	.2940-03	.2397-03	.3315-03	.1530	1.551	539.6
1	1 0000	.55000	12.000	.2090-01	.1740-01	.2350-01	.3240-03	.2642-03	.3654-03	.1680	1.694	539.0
1	1 0000	.57500	13.000	.3020-01	.2460-01	.3410-01	.4696-03	.3829-03	.5296-03	.2440	2.475	539.9
1	1 0000	.60000	14.000	.4000-01	.3260-01	.4520-01	.6221-03	.5071-03	.7017-03	.3230	3.275	540.4
1	1 0000	.65000	15.000	.5000-01	.4000-01	.5520-01	.8443-03	.6949-03	.9462-03	.2520	2.464	539.8
1	1 0000	.70000	16.000	.6000-01	.5000-01	.6520-01	.1043-03	.8443-03	.1043-03	.1370	1.392	539.3
1	1 0000	.75000	17.000	.7000-01	.6000-01	.7520-01	.1243-03	.1043-03	.1243-03	.1370	1.392	539.3
1	1 0000	.80000	18.000	.8000-01	.7000-01	.8520-01	.1443-03	.1243-03	.1443-03	.1370	1.392	539.3
1	1 0000	.85000	19.000	.9000-01	.8000-01	.9520-01	.1643-03	.1443-03	.1643-03	.1370	1.392	539.3
1	1 0000	.90000	20.000	1.0000-01	.9000-01	1.0520-01	.1843-03	.1643-03	.1843-03	.1370	1.392	539.3
1	1 0000	.95000	21.000	1.1000-01	1.0000-01	1.1520-01	.2043-03	.1843-03	.2043-03	.1370	1.392	539.3
1	1 0000	1.0000	22.000	1.2000-01	1.1000-01	1.2520-01	.2243-03	.2043-03	.2243-03	.1370	1.392	539.3

REPRODUCED FROM FILE
 ORIGINAL PAGE IS POOR

DATE 07 OCT 75

ON-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 2

(R/6011)

ON-74 (AEDC V418-B8A) B62C12F10H16H127E53VBR19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEC. R /SEC	TH DEG. R
1	2.0000	57000	23.000	.3970-01	.3230-01	.4480-01	.6164-03	.5025-03	.6953-03	.3200	3.572	540.1
1	2.0000	56700	24.000	.4210-01	.3430-01	.4750-01	.6537-03	.5328-03	.7374-03	.3390	3.692	540.6
1	2.0000	56000	25.000	.3100-01	.2530-01	.3500-01	.4818-03	.3928-03	.5433-03	.2500	2.727	539.6
1	2.0000	57000	26.000	.1500-01	.1220-01	.1690-01	.2326-03	.1897-03	.2623-03	.1210	1.321	538.4
1	2.0000	70500	27.200	.1130-01	.9700-02	.1340-01	.1844-03	.1504-03	.2078-03	.9600-01	1.038	537.7
1	2.0000	79000	28.000	.1020-01	.8300-02	.1150-01	.1593-03	.1292-03	.1784-03	.8300-01	.9100	537.4
1	2.0000	80000	29.000	.1000-02	.6400-02	.8800-02	.1714-03	.9905-04	.1368-03	.6300-01	.7010	537.6
1	2.0000	82400	30.000	.2400-02	.2000-02	.2700-02	.3778-04	.3081-04	.4259-04	.2000-01	.2750	538.4
1	3.0000	20000	31.000	.2990-01	.2430-01	.3370-01	.4640-03	.3781-03	.5234-03	.2400	2.554	541.2
1	3.0000	22500	32.000	.2210-01	.1800-01	.2490-01	.3429-03	.2795-03	.3868-03	.1780	1.996	540.2
1	3.0000	25000	33.000	.1750-01	.1430-01	.1970-01	.2718-03	.2216-03	.3364-03	.1410	1.587	539.0
1	3.0000	27500	34.000	.1370-01	.1120-01	.1540-01	.2124-02	.1733-03	.2395-03	.1110	1.329	538.4
1	3.0000	30000	35.000	.1190-01	.9700-02	.1340-01	.1842-03	.1503-03	.2076-03	.9600-01	1.192	537.9
1	3.0000	32500	36.000	.1210-01	.9800-02	.1360-01	.1873-03	.1528-03	.2111-03	.9800-01	1.148	537.9
1	3.0000	35000	37.000	.1330-01	.1090-01	.1500-01	.2067-03	.1686-03	.2329-03	.1080	1.254	537.9
1	3.0000	37500	38.000	.1430-01	.1150-01	.1610-01	.2218-03	.1809-03	.2500-03	.1160	1.359	538.1
1	3.0000	40000	39.000	.2140-01	.1750-01	.2420-01	.3329-03	.2716-03	.3753-03	.1730	2.051	538.1
1	3.0000	42500	40.000	.3050-01	.2490-01	.3440-01	.4738-03	.3863-03	.5342-03	.2460	2.928	539.1
1	3.0000	45000	41.000	.3580-01	.2920-01	.4030-01	.55-03	.4532-03	.6268-03	.2890	3.310	539.3
1	3.0000	47500	42.000	.3940-01	.3210-01	.4450-01	.6290-03	.4993-03	.6907-03	.3180	3.551	539.9
1	3.0000	50000	43.000	.4200-01	.3420-01	.4730-01	.6517-03	.5312-03	.7351-03	.3380	3.773	540.5
1	3.0000	52500	44.000	.3630-01	.2960-01	.4100-01	.5641-03	.4599-03	.6362-03	.2930	3.442	539.9
1	3.0000	55000	45.000	.2920-01	.2380-01	.3290-01	.4531-03	.3694-03	.5110-03	.2350	2.629	539.6
1	3.0000	57500	46.000	.1720-01	.1400-01	.1940-01	.2677-03	.2183-03	.3018-03	.1390	1.517	539.0
1	3.0000	60000	47.000	.1190-01	.9700-02	.1350-01	.1856-03	.1514-03	.2093-03	.9700-01	1.029	538.4
1	3.0000	62500	48.000	.8330-02	.6900-02	.9300-02	.1287-03	.1050-03	.1451-03	.6700-01	.7420	538.1
1	3.0000	65000	49.000	.7100-02	.5900-02	.8000-02	.1107-03	.9030-04	.1247-03	.5800-01	.6300	537.3
1	3.0000	67500	50.000	.4900-02	.4000-02	.5600-02	.7663-04	.6253-04	.8636-04	.4000-01	.4300	537.2
1	3.0000	70000	51.000	.2600-02	.2100-02	.2900-02	.3997-04	.3250-04	.4493-04	.2100-01	.2570	538.7
1	3.0000	72500	52.000	.4800-02	.3900-02	.5400-02	.7505-04	.6120-04	.8463-04	.3900-01	.4840	539.4
1	3.0000	75000	53.000	.5900-02	.4800-02	.6600-02	.9000-04	.7410-04	.1025-03	.4700-01	.6590	540.0
1	3.0000	77500	54.000	.6200-02	.5000-02	.7000-02	.9588-04	.7816-04	.1081-03	.5000-01	.6530	540.2
1	3.0000	80000	55.000	.3480-01	.2830-01	.3930-01	.5404-03	.4400-03	.6100-03	.2790	3.184	543.0
1	3.0000	82500	56.000	.2720-01	.2220-01	.3070-01	.4227-03	.3443-03	.4770-03	.2180	2.564	542.4
1	3.0000	85000	57.000	.2140-01	.1740-01	.2410-01	.3318-03	.2704-03	.3744-03	.1720	2.016	541.7
1	3.0000	87500	58.000	.1620-01	.1350-01	.1900-01	.2582-03	.2104-03	.2914-03	.1347	1.655	541.9
1	3.0000	90000	59.000	.1550-01	.1260-01	.1820-01	.2506-03	.2043-03	.2875-03	.1300	1.709	539.9
1	3.0000	92500	60.000	.1740-01	.1420-01	.1950-01	.2700-03	.2201-03	.3045-03	.1400	1.841	540.2
1	3.0000	95000	61.000	.2440-01	.2020-01	.2790-01	.3848-03	.3137-03	.4340-03	.2000	2.622	540.4
1	3.0000	97500	62.000	.3500-01	.2930-01	.4060-01	.5587-03	.4552-03	.6303-03	.2890	3.797	541.4
1	3.0000	40000	63.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	42500	64.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	45000	65.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	47500	66.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	50000	67.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	52500	68.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	55000	69.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	57500	70.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	60000	71.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	62500	72.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	65000	73.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	67500	74.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	70000	75.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	72500	76.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	75000	77.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	77500	78.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	80000	79.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	82500	80.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	85000	81.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	87500	82.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	90000	83.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	92500	84.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	95000	85.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	97500	86.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	40000	87.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	42500	88.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	45000	89.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	47500	90.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	50000	91.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	52500	92.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	55000	93.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	57500	94.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	60000	95.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	62500	96.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4
1	3.0000	65000	97.000	.3570-01	.2930-01	.4370-01	.6713-03	.4899-03	.6784-03	.3110	4.086	541.4

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-B8A) B62C12F10H16H127E2V8R19

DATE 07 JUL 75

RUN NUMBER	TPA E	A	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
2	2.0000	.53000	23.000	.2630-01	.2150-01	.2970-01	.4068-03	.3314-03	.4591-03	.2100	2.347	542.0
2	2.0000	.55700	24.000	.1560-01	.1270-01	.1760-01	.2409-03	.1963-03	.2718-03	.1250	1.358	541.3
2	2.0000	.62000	25.000	.1020-01	.8300-02	.1150-01	.569-03	.1278-03	.1770-03	.8100-01	.8850	541.2
2	2.0000	.67000	26.000	.4600-02	.3800-02	.5200-02	.7161-04	.5838-04	.8077-04	.3700-01	.4050	540.1
2	2.0000	.70500	27.000	.4500-02	.3700-02	.5100-02	.7005-04	.5712-04	.7900-04	.3600-01	.3930	539.5
2	2.0000	.75000	28.000	.5000-02	.4100-02	.5600-02	.7689-04	.6270-04	.8670-04	.4000-01	.4400	539.1
2	2.0000	.80000	29.000	.3800-02	.3100-02	.4300-02	.5829-04	.4753-04	.6573-04	.3000-01	.3350	539.1
2	2.0000	.82400	30.000	.6000-03	.5700-03	.7000-03	.9064-05	.7392-05	.1022-04	.5000-02	.6600-01	539.1
2	2.0000	.82000	31.000	.2930-01	.2300-01	.3310-01	.4526-03	.3687-03	.5108-03	.2340	2.484	542.4
2	3.0000	.82500	32.000	.2330-01	.1900-01	.2630-01	.3596-03	.2929-03	.4057-03	.1860	2.084	542.1
2	3.0000	.85000	33.000	.1860-01	.1520-01	.2100-01	.2877-03	.2344-03	.3247-03	.1490	1.668	542.0
2	3.0000	.87000	34.000	.1470-01	.1200-01	.1660-01	.2273-03	.1851-03	.2564-03	.1180	1.410	541.9
2	3.0000	.87500	35.000	.1310-01	.1070-01	.1480-01	.2020-03	.1646-03	.2279-03	.1050	1.295	541.8
2	3.0000	.89000	36.000	.1450-01	.1180-01	.1630-01	.2237-03	.1822-03	.2524-03	.1150	1.358	541.9
2	3.0000	.90000	37.000	.1690-01	.1380-01	.1910-01	.2617-03	.2132-03	.2953-03	.1350	1.573	542.0
2	3.0000	.90500	38.000	.2630-01	.2140-01	.2960-01	.4055-03	.3304-03	.4576-03	.2100	2.462	542.1
2	3.0000	.94000	39.000	.3050-01	.2500-01	.3450-01	.4733-03	.3855-03	.5340-03	.2450	2.889	542.0
2	3.0000	.94500	40.000	.3400-01	.2820-01	.3900-01	.5343-03	.4351-03	.6030-03	.2760	3.271	542.9
2	3.0000	.95000	41.000	.3110-01	.2530-01	.3510-01	.4801-03	.3911-03	.5418-03	.2480	2.839	542.2
2	3.0000	.95500	42.000	.2560-01	.2090-01	.2890-01	.3962-03	.3228-03	.4470-03	.2050	2.287	541.7
2	3.0000	.96000	43.000	.1850-01	.1510-01	.2090-01	.2859-03	.2330-03	.3226-03	.1480	1.650	541.8
2	3.0000	.96500	44.000	.1270-01	.1030-01	.1430-01	.1955-03	.1593-03	.2206-03	.1010	1.190	541.0
2	3.0000	.97000	45.000	.1050-01	.8600-02	.1190-01	.1624-03	.1323-03	.1832-03	.8400-01	.9390	541.0
2	3.0000	.98000	46.000	.7300-02	.6000-02	.8300-02	.1135-03	.9253-04	.1280-03	.5900-01	.6410	540.4
2	3.0000	.98500	47.000	.6000-02	.4900-02	.6700-02	.9210-04	.7514-04	.1039-03	.4800-01	.5090	540.0
2	3.0000	.70000	48.000	.4500-02	.3700-02	.5100-02	.5950-04	.5675-04	.7847-04	.3500-01	.4000	539.4
2	3.0000	.75000	49.000	.3100-02	.2500-02	.3500-02	.4733-04	.3850-04	.5336-04	.2500-01	.2680	539.0
2	3.0000	.80000	50.000	.2200-01	.1800-02	.2500-02	.3459-04	.2820-04	.3900-04	.1800-01	.1930	539.0
2	3.0000	.85000	51.000	.3000-03	.3000-03	.4000-03	.4833-05	.3941-05	.5451-05	.3000-02	.3100-01	539.8
2	3.0000	.87500	52.000	.2400-02	.1900-02	.2700-02	.3540-04	.2958-04	.4105-04	.1900-01	.2340	540.0
2	3.0000	.90000	53.000	.2300-02	.1900-02	.2600-02	.3613-04	.2945-04	.4076-04	.1900-01	.2620	540.4
2	3.0000	.92500	54.000	.2400-02	.1900-02	.2700-02	.3637-04	.2964-04	.4102-04	.1900-01	.2480	540.6
2	3.0000	.95000	55.000	.1800-02	.1500-02	.2100-02	.2810-04	.2298-04	.3180-04	.1900-01	.1490	540.1
2	3.0000	.95000	56.000	.3500-01	.2850-01	.3950-01	.5402-03	.4400-03	.6095-03	.2790	3.196	542.0
2	4.0000	.95000	57.000	.2700-01	.2200-01	.3050-01	.4175-03	.3404-03	.4711-03	.2160	2.542	541.0
2	4.0000	.95000	58.000	.2090-01	.1700-01	.2350-01	.3230-03	.2631-03	.3645-03	.1670	1.961	542.0
2	4.0000	.95000	59.000	.1900-01	.1470-01	.2000-01	.2780-03	.2270-03	.3146-03	.1440	1.782	543.1
2	4.0000	.95000	60.000	.1830-01	.1490-01	.2070-01	.2826-03	.2301-03	.3170-03	.1460	1.912	543.2
2	4.0000	.95000	61.000	.2440-01	.1990-01	.2750-01	.3070-03	.2425-03	.3425-03	.1950	2.550	543.3
2	4.0000	.95000	62.000	.3220-01	.2620-01	.3640-01	.4978-03	.4053-03	.5620-03	.2570	3.362	544.0
2	4.0000	.95000	63.000	.2640-01	.2150-01	.2990-01	.4082-03	.3324-03	.4609-03	.2110	2.762	543.2
2	4.0000	.95000	64.000	.1880-01	.1530-01	.2130-01	.2909-03	.2359-03	.3283-03	.1500	1.969	543.0
2	4.0000	.95000	65.000	.1430-01	.1160-01	.1610-01	.2203-03	.1794-03	.2486-03	.1140	1.493	542.5

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 6

04-74 (AEDC V41B-B8A) B62C12F10M16H127E32V8R19

(RV80011)

RUN NUMBER	TIME	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAH) BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TM DEG. R
2	4.0000	.45000	62.000	.050-01	.8500-02	.1180-01	.1616-03	.1317-03	.1924-03	.8400-01	1.084	542.1
2	4.0000	.47500	63.000	.9000-02	.7300-02	.1010-01	.1383-03	.1127-03	.1561-03	.7200-01	.9120	542.1
2	4.0000	.50000	64.000	.6600-02	.5400-02	.7500-02	.1027-03	.8365-04	.1158-03	.5300-01	.6590	541.7
2	4.0000	.52500	65.000	.5700-02	.4600-02	.6400-02	.8773-04	.7149-04	.9898-04	.4500-01	.5630	541.5
2	4.0000	.55000	66.000	.4400-02	.3500-02	.5000-02	.6792-04	.5535-04	.7662-04	.3500-01	.4130	541.1
2	4.0000	.60000	67.000	.3400-02	.2700-02	.3800-02	.5205-04	.4242-04	.5871-04	.2700-01	.3040	540.5
2	4.0000	.65000	68.000	.2800-02	.2300-02	.3200-02	.4394-04	.3581-04	.4955-04	.2300-01	.2600	540.3
2	4.0000	.70000	69.000	.2500-02	.2000-02	.2800-02	.3797-04	.3096-04	.4283-04	.2000-01	.2000	540.1
2	4.0000	.75000	70.000	.8000-03	.7000-03	.9000-03	.1273-04	.1038-04	.1435-04	.7000-02	.7400-01	539.4
2	4.0000	.80000	75.000	.1000-02	.8000-03	.1200-02	.1591-04	.1297-04	.1794-04	.8000-02	.1000+00	539.8
2	4.0000	.85000	76.000	.2300-02	.1900-02	.2600-02	.3581-04	.2922-04	.4037-04	.1900-01	.2220	538.0
2	4.0000	.90000	77.000	.5000-03	.4000-03	.6000-03	.7866-05	.6415-05	.8869-05	.4000-02	.5400-01	539.0
2	4.0000	.92500	78.000	.5000-03	.4000-03	.5000-03	.7478-05	.6058-05	.8433-05	.4000-02	.5000-01	539.5
2	4.0000	.95000	79.000	.8000-03	.7000-03	.9000-03	.1282-04	.1046-04	.1446-04	.7000-02	.8300-01	539.8
2	4.0000	.95000	80.000	.9700-03	.7000-03	.1000-02	.1309-04	.1068-04	.1477-04	.7000-02	.8000-01	539.5

DATE 07 OCT 75

OH-7A (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 7

ORBITER FUSELAGE

OH-7A (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

(RVB0011)

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
3	7.880	29.77	83.80	1177.	180.0	.0000	87.70	.9000-02	.4110	3616.	.9055-05	7062-07

RUN NUMBER	RN/L X10 ⁶ /FT	HREF BTU/ R FT ² SEC .0175	STN NO R= .5953-01
3	.4637		

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	R-TAM R=1.0	H1GTO BTU/ R FT ² SEC	H1TO BTU/ R FT ² SEC	H1TAH BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTHOT DEG. R /SEC	TH DEG. R
3	1.0000	.27500	1.0000	.1360-01	.1110-01	.1540-01	.2112-03	.1720-03	.2383-03	.1090	1.132	542.5
3	1.0000	.30000	2.0000	.1170-01	.0900-02	.1310-01	.1804-03	.1470-03	.2036-03	.9300-01	.9910	542.2
3	1.0000	.32500	3.0000	.1080-01	.0800-01	.1220-01	.1671-03	.1362-03	.1886-03	.8600-01	.8880	542.1
3	1.0000	.35000	4.0000	.1160-01	.0400-02	.1310-01	.1792-03	.1460-03	.2022-03	.9300-01	.9620	542.1
3	1.0000	.37500	5.0000	.1200-01	.0800-02	.1360-01	.1860-03	.1515-03	.2099-03	.9600-01	1.011	542.3
3	1.0000	.40000	6.0000	.1800-01	.1470-01	.2030-01	.2785-03	.2269-03	.3143-03	.1440	1.480	542.3
3	1.0000	.42500	7.0000	.2070-01	.1680-01	.2330-01	.3199-03	.2605-03	.3610-03	.1550	1.713	542.8
3	1.0000	.45000	8.0000	.2280-01	.1850-01	.2570-01	.3527-03	.2872-03	.3980-03	.1820	1.863	542.8
3	1.0000	.47500	9.0000	.2620-01	.2130-01	.2960-01	.4057-03	.3304-03	.4579-03	.2100	2.133	542.8
3	1.0000	.50000	10.000	.2800-01	.2280-01	.3160-01	.4339-03	.3534-03	.4897-03	.2240	2.272	542.6
3	1.0000	.52500	11.000	.2080-01	.1700-01	.2350-01	.3224-03	.2626-03	.3639-03	.1670	1.688	542.6
3	1.0000	.55000	12.000	.1700-01	.1380-01	.1920-01	.2529-03	.2142-03	.2966-03	.1360	1.366	542.0
3	1.0000	.60000	13.000	.1090-01	.0800-02	.1220-01	.1679-03	.1368-03	.1895-03	.8700-01	.8810	541.8
3	1.0000	.65000	14.000	.9200-02	.7500-02	.1040-01	.1423-03	.1160-03	.1606-03	.7400-01	.7470	541.4
3	1.0000	.70000	15.000	.7100-02	.5800-02	.8000-02	.1095-03	.8928-04	.1235-03	.5700-01	.5560	540.6
3	1.0000	.75000	16.000	.5400-02	.4400-02	.6100-02	.8311-04	.6773-04	.9376-04	.4300-01	.4370	541.0
3	1.0000	.80000	17.000	.2300-02	.1900-02	.2600-02	.3568-04	.2909-04	.4024-04	.1900-01	.1800	539.7
3	2.0000	.85000	18.000	.1520-01	.1240-01	.1720-01	.2354-03	.1917-03	.2677-03	.1220	1.427	542.6
3	2.0000	.33700	19.000	.1420-01	.1160-01	.1610-01	.2204-03	.1796-03	.2487-03	.1140	1.343	542.6
3	2.0000	.39000	20.000	.2790-01	.2270-01	.3150-01	.4325-03	.3522-03	.4882-03	.2230	2.633	543.1
3	2.0000	.42600	21.000	.2540-01	.2070-01	.2870-01	.3933-03	.3202-03	.4440-03	.2030	2.378	543.8
3	2.0000	.47800	22.000	.2100-01	.1710-01	.2370-01	.3253-03	.2649-03	.3672-03	.1660	1.871	543.3

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V418-B8A) 862C12F10H16W127E52VBR19

(RVB001)

RUN NUMBER	TRACE	X/L	T/C NO	W/HREF		W/HREF		W/HREF		H(9T)		H(10)		H(11)		QDOT BTU/ FT2SEC	OTWOT DEG. R /SEC	TW CEG. R
				R=0.9	R=1.0	R-TAM	FT2SEC	BTU/ R	FT2SEC	BTU/ R	FT2SEC	BTU/ R	FT2SEC	BTU/ R	FT2SEC			
3	2.0000	53000	23.000	.1070-01	.8700-02	.1210-01	.1655-03	.1748-03	.1868-03	.1900-01	.1950-01	.2000-01	.2050-01	.2100-01	.2150-01	.2200-01	.2250-01	.2300-01
3	2.0000	56700	24.000	.1010-01	.8300-02	.1150-01	.1572-03	.1280-03	.1773-03	.1810-01	.1860-01	.1910-01	.1960-01	.2010-01	.2060-01	.2110-01	.2160-01	.2210-01
3	2.0000	62000	25.000	.7300-02	.6000-02	.8300-02	.1133-03	.9232-04	.1278-03	.1320-01	.1370-01	.1420-01	.1470-01	.1520-01	.1570-01	.1620-01	.1670-01	.1720-01
3	2.0000	67000	26.000	.7800-02	.6300-02	.8800-02	.1206-03	.9832-04	.1360-03	.1400-01	.1450-01	.1500-01	.1550-01	.1600-01	.1650-01	.1700-01	.1750-01	.1800-01
3	2.0000	70500	27.000	.7800-02	.6300-02	.8800-02	.1203-03	.9812-04	.1357-03	.1390-01	.1440-01	.1490-01	.1540-01	.1590-01	.1640-01	.1690-01	.1740-01	.1790-01
3	2.0000	75000	28.000	.3800-02	.3100-02	.4300-02	.5957-04	.4858-04	.6717-04	.3100-01	.3410-01	.3720-01	.4030-01	.4340-01	.4650-01	.4960-01	.5270-01	.5580-01
3	2.0000	80000	29.000	.2200-02	.1800-02	.2500-02	.3388-04	.2762-04	.3820-04	.1800-01	.1950-01	.2100-01	.2250-01	.2400-01	.2550-01	.2700-01	.2850-01	.3000-01
3	2.0000	82400	30.000	.1000-03	.1000-03	.1000-03	.1379-05	.1125-05	.1555-05	.1000-02	.1000-02	.1000-02	.1000-02	.1000-02	.1000-02	.1000-02	.1000-02	.1000-02
3	2.0000	82400	31.000	.2880-01	.2340-01	.3250-01	.4452-03	.3625-03	.5026-03	.2300-01	.2438-01	.2576-01	.2714-01	.2852-01	.2990-01	.3128-01	.3266-01	.3404-01
3	3.0000	20000	31.000	.2380-01	.1940-01	.2680-01	.3582-03	.2939-03	.4156-03	.1900-01	.2038-01	.2176-01	.2314-01	.2452-01	.2590-01	.2728-01	.2866-01	.3004-01
3	3.0000	22500	32.000	.1960-01	.1600-01	.2210-01	.3038-03	.2474-03	.3429-03	.1570-01	.1708-01	.1846-01	.1984-01	.2122-01	.2260-01	.2398-01	.2536-01	.2674-01
3	3.0000	25000	33.000	.1590-01	.1300-01	.1800-01	.2464-03	.2006-03	.2780-03	.1270-01	.1408-01	.1546-01	.1684-01	.1822-01	.1960-01	.2098-01	.2236-01	.2374-01
3	3.0000	27500	34.000	.1590-01	.1300-01	.1800-01	.2464-03	.2006-03	.2780-03	.1270-01	.1408-01	.1546-01	.1684-01	.1822-01	.1960-01	.2098-01	.2236-01	.2374-01
3	3.0000	30000	35.000	.1420-01	.1150-01	.1600-01	.2191-03	.1785-03	.2473-03	.1130-01	.1268-01	.1406-01	.1544-01	.1682-01	.1820-01	.1958-01	.2096-01	.2234-01
3	3.0000	32500	36.000	.1620-01	.1320-01	.1830-01	.2516-03	.2049-03	.2839-03	.1300-01	.1438-01	.1576-01	.1714-01	.1852-01	.1990-01	.2128-01	.2266-01	.2404-01
3	3.0000	35000	37.000	.2450-01	.1990-01	.2760-01	.3790-03	.3086-03	.4278-03	.1960-01	.2098-01	.2236-01	.2374-01	.2512-01	.2650-01	.2788-01	.2926-01	.3064-01
3	3.0000	37500	39.000	.3150-01	.2560-01	.3560-01	.4877-03	.3971-03	.5505-03	.2520-01	.2658-01	.2796-01	.2934-01	.3072-01	.3210-01	.3348-01	.3486-01	.3624-01
3	3.0000	40000	40.000	.2030-01	.1660-01	.2300-01	.3150-03	.2565-03	.3355-03	.1630-01	.1768-01	.1906-01	.2044-01	.2182-01	.2320-01	.2458-01	.2596-01	.2734-01
3	3.0000	42500	40.000	.1940-01	.1580-01	.2190-01	.3007-03	.2449-03	.3395-03	.1550-01	.1688-01	.1826-01	.1964-01	.2102-01	.2240-01	.2378-01	.2516-01	.2654-01
3	3.0000	45000	41.000	.1560-01	.1270-01	.1760-01	.2421-03	.1971-03	.2732-03	.1250-01	.1388-01	.1526-01	.1664-01	.1802-01	.1940-01	.2078-01	.2216-01	.2354-01
3	3.0000	47500	42.000	.1250-01	.1020-01	.1410-01	.1932-03	.1574-03	.2181-03	.1000-00	.1138-01	.1276-01	.1414-01	.1552-01	.1690-01	.1828-01	.1966-01	.2104-01
3	3.0000	50000	43.000	.1030-01	.8400-02	.1160-01	.1593-03	.1298-03	.1798-03	.8200-01	.9170-01	.1014-01	.1118-01	.1222-01	.1326-01	.1430-01	.1534-01	.1638-01
3	3.0000	52500	44.000	.7800-02	.6300-02	.8800-02	.1207-03	.9832-04	.1362-03	.6200-01	.7330-01	.8460-01	.9590-01	.1072-01	.1194-01	.1316-01	.1438-01	.1560-01
3	3.0000	55000	45.000	.6900-02	.5700-02	.7800-02	.1074-03	.8749-04	.1212-03	.5600-01	.6820-01	.8040-01	.9260-01	.1048-01	.1170-01	.1292-01	.1414-01	.1536-01
3	3.0000	58000	46.000	.5300-02	.4300-02	.6000-02	.8190-04	.6874-04	.9239-04	.4200-01	.5120-01	.6040-01	.6960-01	.7880-01	.8800-01	.9720-01	.1064-01	.1156-01
3	3.0000	60000	47.000	.4400-02	.3600-02	.4900-02	.6783-04	.5613-04	.7687-04	.3600-01	.4320-01	.5040-01	.5760-01	.6480-01	.7200-01	.7920-01	.8640-01	.9360-01
3	3.0000	62000	48.000	.2800-02	.2300-02	.3100-02	.4288-04	.3498-04	.4838-04	.2800-01	.3400-01	.4000-01	.4600-01	.5200-01	.5800-01	.6400-01	.7000-01	.7600-01
3	3.0000	75000	49.000	.2000-02	.1600-02	.2300-02	.3114-04	.2519-04	.3511-04	.1800-01	.2110-01	.2420-01	.2730-01	.3040-01	.3350-01	.3660-01	.3970-01	.4280-01
3	3.0000	80000	50.000	.9000-03	.7000-03	.1000-02	.1371-04	.1118-04	.1546-04	.7000-02	.8400-02	.9800-02	.1120-02	.1260-02	.1400-02	.1540-02	.1680-02	.1820-02
3	3.0000	85000	51.000	.1700-02	.1400-02	.2000-02	.2696-04	.2199-04	.3040-04	.1400-01	.1710-01	.2020-01	.2330-01	.2640-01	.2950-01	.3260-01	.3570-01	.3880-01
3	3.0000	87500	52.000	.2000-03	.2000-03	.3000-03	.3719-05	.3032-05	.4194-05	.2000-02	.2400-02	.2800-02	.3200-02	.3600-02	.4000-02	.4400-02	.4800-02	.5200-02
3	3.0000	90000	53.000	.3000-03	.3000-03	.4000-03	.5302-05	.4322-05	.5980-05	.3000-02	.3600-02	.4200-02	.4800-02	.5400-02	.6000-02	.6600-02	.7200-02	.7800-02
3	3.0000	92500	54.000	.5000-03	.4000-03	.6000-03	.7635-05	.6224-05	.8512-05	.4000-02	.4800-02	.5600-02	.6400-02	.7200-02	.8000-02	.8800-02	.9600-02	.1040-02
3	3.0000	95000	55.000	.2000-03	.2000-03	.3000-03	.3237-05	.2639-05	.3551-05	.2000-02	.2400-02	.2800-02	.3200-02	.3600-02	.4000-02	.4400-02	.4800-02	.5200-02
3	3.0000	20000	71.000	.3450-01	.2810-01	.3890-01	.5339-03	.4345-03	.6027-03	.2750-01	.3350-01	.3950-01	.4550-01	.5150-01	.5750-01	.6350-01	.6950-01	.7550-01
3	3.0000	22500	72.000	.2620-01	.2140-01	.2960-01	.4061-03	.3307-03	.4583-03	.2100-01	.2500-01	.2900-01	.3300-01	.3700-01	.4100-01	.4500-01	.4900-01	.5300-01
3	3.0000	25000	73.000	.2150-01	.1750-01	.2430-01	.3330-03	.2711-03	.3758-03	.1720-01	.2120-01	.2520-01	.2920-01	.3320-01	.3720-01	.4120-01	.4520-01	.4920-01
3	3.0000	27500	74.000	.1890-01	.1530-01	.2120-01	.2907-03	.2367-03	.3282-03	.1500-01	.1900-01	.2300-01	.2700-01	.3100-01	.3500-01	.3900-01	.4300-01	.4700-01
3	3.0000	30000	76.000	.1980-01	.1610-01	.2240-01	.3068-03	.2498-03	.3424-03	.1580-01	.1980-01	.2380-01	.2780-01	.3180-01	.3580-01	.3980-01	.4380-01	.4780-01
3	3.0000	32500	77.000	.2640-01	.2150-01	.2980-01	.4086-03	.3326-03	.4613-03	.2110-01	.2510-01	.2910-01	.3310-01	.3710-01	.4110-01	.4510-01	.4910-01	.5310-01
3	3.0000	35000	78.000	.2120-01	.1720-01	.2390-01	.3279-03	.2669-03	.3701-03	.1690-01	.2090-01	.2490-01	.2890-01	.3290-01	.3690-01	.4090-01	.4490-01	.4890-01
3	3.0000	37500	79.000	.1470-01	.1200-01	.1660-01	.2276-03	.1853-03	.2569-03	.1170-01	.1370-01	.1570-01	.1770-01	.1970-01	.2170-01	.2370-01	.2570-01	.2770-01
3	3.0000	40000	80.000	.1390-01	.1100-01	.1680-02	.2230-03	.1730-03	.2359-03	.1139-01	.1339-01	.1539-01	.1739-01	.1939-01	.2139-01	.2339-01	.2539-01	.2739-01
3	3.0000	42500	81.000	.8400-02	.6800-02	.9400-02	.1293-03	.1053-03	.1460-03	.6700-01	.8100-01	.9500-01	.1090-01	.1230-01	.1370-01	.1510-01	.1650-01	.1790-01

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 9

(R/B001)

04-74 (AEDC V41B-B8A) 862C12F10M16W127E52VBR19

PUN NUMBER	TR. E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H1G10 BTU/R	H1G10 FT2SEC	H1T0 BTU/R	H1T0 FT2SEC	H1TAM BTU/R	H1TAM FT2SEC	QDOT BTU/	QDOT FT2SEC	DTWDT DEG. R	TH DEG. R
3	4.0000	.45000	62.000	.68000	.56000	.77000	.1056-03	.8601-04	.6702-04	.8228-04	.1192-03	.5500-01	.5500-01	.7070	542.8	
3	4.0000	.47500	63.000	.53000	.43000	.60000	.8228-04	.6702-04	.6702-04	.8228-04	.1192-03	.4300-01	.4300-01	.5420	542.5	
3	4.0000	.50000	64.000	.42000	.34000	.47000	.6459-04	.5262-04	.5262-04	.6459-04	.1192-03	.3300-01	.3300-01	.4140	542.0	
3	4.0000	.52500	65.000	.37000	.30000	.41000	.5679-04	.4627-04	.4627-04	.5679-04	.1192-03	.2900-01	.2900-01	.3640	541.7	
3	4.0000	.55000	66.000	.37000	.30000	.42000	.5779-04	.4709-04	.4709-04	.5779-04	.1192-03	.3000-01	.3000-01	.3520	541.2	
3	4.0000	.60000	67.000	.20000	.16000	.23000	.3122-04	.2544-04	.2544-04	.3122-04	.1192-03	.1600-01	.1600-01	.1830	540.6	
3	4.0000	.65000	68.000	.11000	.90000	.13000	.1771-04	.1443-04	.1443-04	.1771-04	.1192-03	.9000-02	.9000-02	.1080	540.3	
3	4.0000	.70000	69.000	.11000	.90000	.12000	.1629-04	.1328-04	.1328-04	.1629-04	.1192-03	.8000-02	.8000-02	.9400-01	540.3	
3	4.0000	.75000	70.000	.14000	.11000	.15000	.2127-04	.1734-04	.1734-04	.2127-04	.1192-03	.1100-01	.1100-01	.1240	539.2	
3	4.0000	.80000	75.000	.10000	.10000	.10000	.1691-05	.1379-05	.1379-05	.1691-05	.1192-03	.1000-02	.1000-02	.1100-01	539.8	
3	4.0000	.85000	76.000	.51000	.41000	.57000	.7852-04	.6403-04	.6403-04	.7852-04	.1192-03	.4100-01	.4100-01	.4850	539.4	
3	4.0000	.87500	77.000	.10000	.10000	.10000	.1221-05	.9961-06	.9961-06	.1221-05	.1192-03	.1000-02	.1000-02	.8000-02	539.0	
3	4.0000	.90000	78.000	.10000	.10000	.10000	.9179-06	.7485-06	.7485-06	.9179-06	.1192-03	.1035-05	.10000	.6000-02	539.4	
3	4.0000	.92500	79.000	.16000	.13000	.18000	.2458-04	.2005-04	.2005-04	.2458-04	.1192-03	.1300-01	.1300-01	.1590	539.4	
3	4.0000	.95000	80.000	.10000	.10000	.10000	.4265-06	.3478-06	.3478-06	.4265-06	.1192-03	.10000	.10000	.3000-02	539.4	

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RV8001)

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52VBR19

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
4	7.880	34.76	24.30	1177.	180.0	.0000	87.70	.1000-01	.4140	3616.	.9113-05	.7062-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC /FT	STN NO R .0175 .5934-01
4	.4667	.1554-01	

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9T) BTU/ R FT ² SEC	H(1T) BTU/ R FT ² SEC	H(TAN) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTMDT DEG. R /SEC	TH DEG. R
4	1.0000	.27500	1.0000	.1550-01	.1260-01	.1750-01	.2406-03	.1959-03	.2715-03	.1240	1.289	542.7
4	1.0000	.30000	2.0000	.1250-01	.1020-01	.1420-01	.1948-03	.1587-03	.2199-03	.1010	1.069	542.6
4	1.0000	.32500	3.0000	.1030-01	.0800-02	.1170-01	.1604-03	.1306-03	.1810-03	.8300-01	.8510	542.6
4	1.0000	.35000	4.0000	.1250-01	.1020-01	.1420-01	.1949-03	.1587-03	.2199-03	.1010	1.045	542.2
4	1.0000	.37500	5.0000	.1670-01	.1360-01	.1890-01	.2599-03	.2116-03	.2933-03	.1340	1.411	542.3
4	1.0000	.40000	6.0000	.2200-01	.1790-01	.2480-01	.3418-03	.2783-03	.3857-03	.1770	1.813	542.3
4	1.0000	.42500	7.0000	.1790-01	.1450-01	.2020-01	.2780-03	.2264-03	.3137-03	.1440	1.489	542.9
4	1.0000	.45000	8.0000	.2510-01	.2040-01	.2630-01	.3892-03	.3170-03	.4392-03	.2010	2.056	542.6
4	1.0000	.47500	9.0000	.2130-01	.1730-01	.2400-01	.3306-03	.2693-03	.3732-03	.1710	1.738	542.8
4	1.0000	.50000	10.0000	.1530-01	.1240-01	.1720-01	.2369-03	.1930-03	.2674-03	.1230	1.242	542.0
4	1.0000	.52500	11.0000	.1730-01	.1410-01	.1960-01	.2694-03	.2195-03	.3040-03	.1390	1.412	542.2
4	1.0000	.55000	12.0000	.1440-01	.1170-01	.1630-01	.2239-03	.1824-03	.2526-03	.1160	1.165	541.7
4	1.0000	.57500	13.0000	.9200-02	.7500-02	.1030-01	.1425-03	.1161-03	.1607-03	.7400-01	.7480	541.4
4	1.0000	.60000	14.0000	.9200-02	.7500-02	.1030-01	.1434-03	.1169-03	.1618-03	.7400-01	.7540	541.0
4	1.0000	.62500	15.0000	.6300-02	.5100-02	.7100-02	.6191-04	.5248-04	.1096-03	.5000-01	.4940	540.2
4	1.0000	.65000	16.0000	.4000-02	.3200-02	.4500-02	.2359-04	.1924-04	.6982-04	.3200-01	.3260	539.7
4	1.0000	.67500	17.0000	.1500-02	.1200-02	.1700-02	.2245-03	.1828-03	.2534-03	.1200-01	.1150	539.1
4	1.0000	.70000	18.0000	.1450-01	.1180-01	.1630-01	.2245-03	.1828-03	.2534-03	.1160	1.359	543.2
4	2.0000	.28500	19.0000	.1520-01	.1240-01	.1720-01	.2368-03	.1928-03	.2672-03	.1220	1.441	543.2
4	2.0000	.33700	20.0000	.2400-01	.1950-01	.2710-01	.3726-03	.3034-03	.4206-03	.1920	2.266	543.4
4	2.0000	.39000	21.0000	.2200-01	.1790-01	.2480-01	.3413-03	.2779-03	.3852-03	.1760	2.065	543.4
4	2.0000	.42600	22.0000	.1410-01	.1150-01	.1590-01	.2187-03	.1781-03	.2468-03	.1130	1.259	542.7

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 11

(RVB001)

OH-74 (AEDC V41B-BBA) B62C12F10M16H127E52V8R19

RUN NUMBER	TRA	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(GTO) BTU/ R FT2SEC	H(TOI) BTU/ R FT2SEC	H(TAW) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
4	2.0000	.53000	23.000	.1230-01	.1000-01	.1390-01	.1908-03	.1554-03	.2153-03	.9900-01	1.101	542.0
4	2.0000	.56700	24.000	.8600-02	.7900-02	.9700-02	.1335-03	.1087-03	.1506-03	.6900-01	.7520	541.7
4	2.0000	.62000	25.000	.6900-02	.5600-02	.7800-02	.1071-03	.8728-04	.1208-03	.5600-01	.6040	541.1
4	2.0000	.67000	26.000	.5300-02	.4300-02	.5900-02	.8189-04	.5675-04	.9236-04	.4200-01	.4630	540.3
4	2.0000	.70500	27.000	.3700-02	.3000-02	.4200-02	.5722-04	.4666-04	.6453-04	.3000-01	.3210	539.5
4	2.0000	.75000	28.000	.1600-02	.1300-02	.1800-02	.2441-04	.1991-04	.2752-04	.1300-01	.1400	538.7
4	2.0000	.80000	29.000	.1000-02	.8000-03	.1100-02	.1507-04	.1229-04	.1699-04	.8000-02	.8700-01	538.7
4	2.0000	.82400	30.000	.0000	.0000	.0000	.3005-07	.2451-07	.3388-07	.0000	.0000	538.7
4	2.0000	.82400	31.000	.2910-01	.2370-01	.3290-01	.4528-03	.3686-03	.5111-03	.2330	2.475	544.0
4	3.0000	.20000	31.000	.2443-01	.1980-01	.2750-01	.3787-03	.3083-03	.4275-03	.1950	2.185	543.9
4	3.0000	.25000	32.000	.2010-01	.1630-01	.2260-01	.3116-03	.2537-03	.3518-03	.1610	1.798	544.0
4	3.0000	.27500	34.000	.1570-01	.1280-01	.1770-01	.2439-03	.1986-03	.2754-03	.1260	1.507	543.5
4	3.0000	.30000	35.000	.1390-01	.1140-01	.1570-01	.2167-03	.1764-03	.2446-03	.1120	1.384	543.3
4	3.0000	.32500	36.000	.2030-01	.1650-01	.2290-01	.3150-03	.2565-03	.3556-03	.1620	1.904	543.8
4	3.0000	.35000	37.000	.2650-01	.2160-01	.2990-01	.4113-03	.3348-03	.4643-03	.2120	2.460	543.9
4	3.0000	.37500	38.000	.2200-01	.1800-01	.2490-01	.3425-03	.2789-03	.3866-03	.1770	2.072	543.5
4	3.0000	.40000	39.000	.1480-01	.1200-01	.1670-01	.2295-03	.1869-03	.2590-03	.1190	1.399	542.7
4	3.0000	.42500	40.000	.1500-01	.1200-01	.1590-01	.2329-03	.1897-03	.2629-03	.1200	1.426	543.1
4	3.0000	.45000	41.000	.1220-01	.1030-01	.1380-01	.1898-03	.1546-03	.2142-03	.9800-01	1.122	542.4
4	3.0000	.47500	42.000	.8700-02	.7100-02	.9800-02	.1348-03	.1098-03	.1522-03	.7000-01	.7770	542.5
4	3.0000	.50000	43.000	.8800-02	.7200-02	.9900-02	.1368-03	.1115-03	.1544-03	.5400-01	.6350	541.4
4	3.0000	.52500	44.000	.6700-02	.5500-02	.7600-02	.1044-03	.8505-04	.1178-03	.5000-01	.5560	541.0
4	3.0000	.55000	45.000	.6200-02	.5000-02	.7000-02	.9618-04	.7838-04	.1085-03	.3500-01	.3860	540.3
4	3.0000	.60000	46.000	.4400-02	.3600-02	.5000-02	.6832-04	.5569-04	.7706-04	.2500-01	.2630	539.6
4	3.0000	.65000	47.000	.3100-02	.2500-02	.3500-02	.4754-04	.3884-04	.5372-04	.2000-01	.2400	539.0
4	3.0000	.70000	48.000	.2700-02	.2200-02	.3000-02	.4166-04	.3397-04	.4697-04	.6000-02	.7000-01	538.7
4	3.0000	.75000	49.000	.8000-03	.7000-03	.9000-03	.1240-04	.1011-04	.1399-04	.8000-02	.8600-01	538.7
4	3.0000	.80000	50.000	.1000-02	.8000-03	.1100-02	.1542-04	.1258-04	.1739-04	.6000-02	.8300-01	539.5
4	3.0000	.90000	53.000	.7000-03	.6000-03	.8000-03	.1147-04	.9353-05	.1294-04	.6000-02	.8300-01	539.5
4	3.0000	.92500	54.000	.8000-03	.6000-03	.9000-03	.1217-04	.9926-05	.1373-04	.6000-02	.8300-01	539.6
4	3.0000	.95000	55.000	.4000-03	.3000-03	.4000-03	.5931-05	.4836-05	.6689-05	.3000-02	.3100-01	539.4
4	4.0000	.20000	71.000	.3370-01	.2750-01	.3810-01	.5242-03	.4264-03	.5920-03	.2690	3.073	545.7
4	4.0000	.22500	72.000	.2620-01	.2140-01	.2960-01	.4077-03	.3218-03	.4603-03	.2100	2.460	544.6
4	4.0000	.25000	73.000	.2140-01	.1740-01	.2410-01	.3321-03	.2702-03	.3750-03	.1710	2.032	544.9
4	4.0000	.27500	74.000	.2010-01	.1630-01	.2310-01	.3115-03	.2535-03	.3518-03	.1600	1.982	544.9
4	4.0000	.30000	75.000	.2050-01	.1670-01	.2310-01	.3180-03	.2588-03	.3590-03	.1640	2.146	544.3
4	4.0000	.32500	76.000	.2130-01	.1740-01	.2410-01	.3316-03	.2599-03	.3743-03	.1710	2.238	544.3
4	4.0000	.35000	78.000	.1490-01	.1220-01	.1690-01	.2319-03	.1899-03	.2618-03	.1200	1.566	544.0
4	4.0000	.37500	59.000	.1160-01	.9400-02	.1310-01	.1803-03	.1468-03	.2035-03	.9300-01	1.219	543.4
4	4.0000	.40000	60.000	.9100-02	.7400-02	.1030-01	.1419-03	.1156-03	.1602-03	.7300-01	.9600	543.2
4	4.0000	.42500	61.000	.7300-02	.5900-02	.8200-02	.1130-03	.9201-04	.1275-03	.5800-01	.7660	542.6
4	4.0000	.45000	62.000	.5900-02	.4800-02	.6600-02	.9104-04	.7416-04	.1027-03	.4700-01	.6100	542.3
4	4.0000	.47500	63.000	.4800-02	.3900-02	.5500-02	.7507-04	.6116-04	.8470-04	.3900-01	.4950	541.8

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75			OH-7A (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE										PACE 12	
			OH-7A (AEDC V41B-B8A) 862C12F10M16H127E52V8R19										(PV8001)	
RUN NUMBER	TRAPE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(OTO) BTU/ R FT2SEC	H(ITO) BTU/ R FT2SEC	H(1AN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTAOT DEG. R /SEC	TH DEG. R		
4	4.0000	.50000	64.000	.3600-02	.2900-02	.4000-02	.5554-04	.4526-04	.6266-04	.2900-01	.3570	541.4		
4	4.0000	.52500	65.000	.3400-02	.2800-02	.3900-02	.5331-04	.4344-04	.6015-04	.2800-01	.3420	541.2		
4	4.0000	.55000	66.000	.2600-02	.2100-02	.2900-02	.3974-04	.2238-04	.4482-04	.2100-01	.2420	540.9		
4	4.0000	.60000	67.000	.2000-02	.1600-02	.2300-02	.3131-04	.2552-04	.3531-04	.1600-01	.1830	540.2		
4	4.0000	.65000	68.000	.8000-03	.7000-03	.9000-03	.1293-04	.1054-04	.1459-04	.7000-02	.7900-01	540.0		
4	4.0000	.70000	69.000	.1300-02	.1000-02	.1400-02	.1943-04	.1584-04	.2191-04	.1000-01	.1130	540.0		
4	4.0000	.75000	70.000	.7000-03	.5000-03	.7000-03	.1014-04	.8270-05	.1143-04	.5000-02	.5900-01	539.1		
4	4.0000	.80000	75.000	.4000-03	.3000-03	.5000-03	.6525-05	.5320-05	.7357-05	.3000-02	.4100-01	539.4		
4	4.0000	.87500	77.000	-.1000-03	-.1000-03	-.1000-03	-.1221-05	-.9961-06	-.1377-05	-.1000-02	-.8000-02	539.0		
4	4.0000	.90000	78.000	.6000-03	.5000-03	.6000-03	.8826-05	.7198-05	.9951-05	.5000-02	.6000-01	538.9		
4	4.0000	.92500	79.000	.1600-02	.1300-02	.1800-02	.2458-04	.2005-04	.2772-04	.1300-01	.1590	539.4		
4	4.0000	.95000	80.000	.1600-02	.1300-02	.1800-02	.2458-04	.2005-04	.2772-04	.0000	.0000	583.3		

ORBITER FUSELAGE PORT SIDE HEATING DATA OH-74 (AEDC V41B-B8A) 862C12F10M18H127E52V8R19

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

PARAMETRIC DATA

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. P	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
5	7.880	39.75	82.90	1177.	180.0	.0000	87.70	.9000-02	.4070	36.6.	.8960-05	.7062-07

RUN NUMBER	RN/L	STN NO	R=
5	.4588	.5984-01	.0175

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(970) BTU/ R FT2SEC	H(101) BTU/ R FT2SEC	H(124) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TM DEG. R
5	1.0000	.27500	1.0000	.1400-01	.1140-01	.1580-01	.2158-03	.1758-03	.2435-03	.1120	1.156	542.6
5	1.0000	.30000	2.0000	.1330-01	.1080-01	.1500-01	.2046-03	.1667-03	.2309-03	.1060	1.123	542.5
5	1.0000	.32500	3.0000	.1200-01	.0900-02	.1360-01	.1853-03	.1509-03	.2091-03	.9600-01	.9840	542.4
5	1.0000	.35000	4.0000	.1000-01	.0700-01	.1100-01	.1612-03	.1288-03	.1947-03	.1350	1.400	542.3
5	1.0000	.37500	5.0000	.0800-01	.0500-01	.0800-01	.1361-03	.1030-03	.1628-03	.1480	1.553	543.0
5	1.0000	.40000	6.0000	.0600-01	.0300-01	.0600-01	.1110-03	.0823-03	.1358-03	.1540	1.579	542.6
5	1.0000	.42500	7.0000	.0400-01	.0200-01	.0400-01	.0860-03	.0628-03	.1049-03	.1560	1.622	542.8
5	1.0000	.45000	8.0000	.0200-01	.0100-01	.0200-01	.0610-03	.0428-03	.0825-03	.1750	1.790	542.8
5	1.0000	.47500	9.0000	.0100-01	.0050-01	.0100-01	.0460-03	.0328-03	.0625-03	.1330	1.356	542.3
5	1.0000	.50000	10.0000	.0050-01	.0020-01	.0050-01	.0310-03	.0228-03	.0425-03	.1440	1.462	542.1
5	1.0000	.52500	11.0000	.0020-01	.0010-01	.0020-01	.0260-03	.0193-03	.0378-03	.1370	1.394	542.0
5	1.0000	.55000	12.0000	.0010-01	.0005-01	.0010-01	.0210-03	.0164-03	.0328-03	.1010	1.031	541.4
5	1.0000	.57500	13.0000	.0005-01	.0002-01	.0005-01	.0160-03	.0128-03	.0278-03	.8200-01	.8300	541.3
5	1.0000	.60000	14.0000	.0002-01	.0001-01	.0002-01	.0110-03	.0086-03	.0228-03	.6400-01	.6490	540.7
5	1.0000	.62500	15.0000	.0001-01	.0000-01	.0001-01	.0060-03	.0046-03	.0178-03	.3600-01	.3540	539.9
5	1.0000	.65000	16.0000	.0000-01	.0000-01	.0000-01	.0010-03	.0006-03	.0128-03	.4000-02	.4400-01	539.2
5	1.0000	.67500	17.0000	.0000-01	.0000-01	.0000-01	.0005-03	.0004-03	.0078-03	.6000-02	.5900-01	538.9
5	1.0000	.70000	18.0000	.0000-01	.0000-01	.0000-01	.0002-03	.0002-03	.0028-03	.1150	1.348	543.0
5	2.0000	.72500	19.0000	.0000-01	.0000-01	.0000-01	.0001-03	.0001-03	.0018-03	.1580	1.867	543.5
5	2.0000	.75000	20.0000	.0000-01	.0000-01	.0000-01	.0000-03	.0000-03	.0014-03	.1630	1.927	543.2
5	2.0000	.77500	21.0000	.0000-01	.0000-01	.0000-01	.0000-03	.0000-03	.0010-03	.1620	1.896	543.3
5	2.0000	.80000	22.0000	.0000-01	.0000-01	.0000-01	.0000-03	.0000-03	.0008-03	.1200	1.335	542.3

DATE 07 OCT 75

OH-7A (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 14

OH-7A (AEDC V41B-88A) B62C12F10H16H127E32V8R19

(RV8001)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF K=1.0	H/HREF R-TAH	H(ISTO) BTU/ R FT2SEC	H(ITO) BTU/ R FT2SEC	H(ITAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	QDOT DEG. R /SEC	TH DEG. R
5	2.0000	.53000	23.000	.1040-01	.8400-02	.1170-01	.1598-03	.1302-03	.1803-03	.8300-01	.8220	541.9
5	2.0000	.56700	24.000	.8000-02	.9500-02	.9000-02	.1228-03	.0991-04	.1383-03	.8400-01	.6910	541.3
5	2.0000	.62000	25.000	.8300-02	.5200-02	.7100-02	.9734-04	.7834-04	.1098-03	.5000-01	.5500	540.7
5	2.0000	.67000	26.000	.7800-02	.6200-02	.8600-02	.1177-03	.9578-04	.1324-03	.6100-01	.6680	539.1
5	2.0000	.70500	27.000	.5200-02	.4300-02	.5900-02	.8048-04	.8584-04	.9074-04	.4200-01	.4520	538.8
5	2.0000	.75000	28.000	.1500-02	.1200-02	.1700-02	.2351-04	.1918-04	.2650-04	.1200-01	.1350	533.3
5	2.0000	.80000	29.000	.1200-02	.1000-02	.1300-02	.1809-04	.1475-04	.2039-04	.9000-02	.1040	533.5
5	2.0000	.82400	30.000	.5000-03	.4000-03	.5000-03	.7256-05	.5918-05	.8181-05	.4000-02	.5300-01	533.6
5	3.0000	.82000	31.000	.3050-01	.2490-01	.3460-01	.4721-03	.3843-03	.5330-03	.2430	2.579	544.3
5	3.0000	.82500	32.000	.2500-01	.2040-01	.2820-01	.3854-03	.3138-03	.4351-03	.1990	2.223	544.0
5	3.0000	.85000	33.000	.1970-01	.1610-01	.2230-01	.3040-03	.2475-03	.3432-03	.1570	1.754	543.9
5	3.0000	.87500	34.000	.1600-01	.1300-01	.1800-01	.2457-03	.2001-03	.2773-03	.1270	1.519	543.4
5	3.0000	.30000	35.000	.1600-01	.1310-01	.1810-01	.2471-03	.2012-03	.2789-03	.1280	1.579	543.2
5	3.0000	.32500	35.000	.2380-01	.1940-01	.2690-01	.3664-03	.2984-03	.4136-03	.1890	2.217	543.4
5	3.0000	.35000	37.000	.2280-01	.1850-01	.2570-01	.3508-03	.2856-03	.3959-03	.1810	2.101	543.3
5	3.0000	.37500	38.000	.1890-01	.1540-01	.2130-01	.2905-03	.2366-03	.3280-03	.1500	1.759	543.2
5	3.0000	.40000	39.000	.1500-01	.1220-01	.1690-01	.2313-03	.1884-03	.2610-03	.1200	1.411	542.3
5	3.0000	.42500	40.000	.1420-01	.1160-01	.1600-01	.2187-03	.1782-03	.2469-03	.1130	1.340	542.6
5	3.0000	.45000	41.000	.1180-01	.9600-02	.1330-01	.1822-03	.1484-03	.2056-03	.9400-01	1.078	541.9
5	3.0000	.47500	42.000	.1010-01	.8200-02	.1140-01	.1553-03	.1265-03	.1752-03	.8000-01	.8950	542.1
5	3.0000	.50000	43.000	.8100-02	.6600-02	.9190-02	.1246-03	.1015-03	.1405-03	.6500-01	.7190	541.6
5	3.0000	.52500	44.000	.6100-02	.5000-02	.6900-02	.9409-04	.7668-04	.1061-03	.4900-01	.5730	541.0
5	3.0000	.55000	45.000	.5600-02	.4500-02	.6300-02	.8559-04	.6976-04	.9655-04	.4400-01	.4950	540.6
5	3.0000	.57500	46.000	.4200-02	.3400-02	.4700-02	.6470-04	.5275-04	.1297-04	.3400-01	.3660	539.9
5	3.0000	.60000	47.000	.4100-02	.3300-02	.4600-02	.6269-04	.5112-04	.7070-04	.3300-01	.3470	539.4
5	3.0000	.62500	48.000	.1600-02	.1300-02	.1800-02	.2490-04	.2031-04	.2808-04	.1300-01	.1430	538.7
5	3.0000	.65000	49.000	.1200-02	.9000-03	.1300-02	.1792-04	.1462-04	.2020-04	.9000-02	.1220	538.3
5	3.0000	.67500	50.000	.7000-03	.6000-03	.8000-03	.1137-04	.9276-05	.1282-04	.6000-02	.6400-01	538.1
5	3.0000	.70000	51.000	.3500-02	.2800-02	.3900-02	.5359-04	.4380-04	.6053-04	.2800-01	.3470	538.3
5	3.0000	.72500	52.000	.2700-02	.1900-02	.1300-02	.1820-04	.1484-04	.2052-04	.9000-02	.1170	538.1
5	3.0000	.75000	53.000	.5000-03	.5000-03	.7000-03	.9044-05	.7375-05	.1020-04	.5000-02	.6600-01	538.2
5	3.0000	.77500	54.000	.4000-03	.3000-03	.4000-03	.5767-05	.4703-05	.6503-05	.3000-02	.3900-01	538.4
5	3.0000	.80000	55.000	.5000-03	.4000-03	.6000-03	.7986-05	.6512-05	.9005-05	.4000-02	.4200-01	539.1
5	3.0000	.82500	56.000	.3200-01	.2680-01	.3720-01	.5069-03	.4123-03	.5725-03	.2600	2.969	545.1
5	3.0000	.85000	57.000	.2570-01	.2090-01	.2800-01	.3958-03	.3221-03	.4470-03	.2040	2.385	545.0
5	3.0000	.87500	58.000	.2590-01	.2100-01	.2910-01	.3974-03	.3234-03	.4487-03	.2040	2.395	544.9
5	3.0000	.90000	59.000	.2190-01	.1780-01	.2470-01	.3372-03	.2744-03	.3807-03	.1730	2.149	544.9
5	3.0000	.92500	60.000	.2450-01	.1990-01	.2770-01	.3776-03	.3073-03	.4212-03	.950	2.549	544.0
5	3.0000	.95000	61.000	.1830-01	.1490-01	.2050-01	.2816-03	.2292-03	.3179-03	.1450	1.90	544.1
5	3.0000	.97500	62.000	.1390-01	.1130-01	.1570-01	.2147-03	.1748-03	.2442-03	.1110	1.452	543.5
5	3.0000	.37500	63.000	.1140-01	.9300-02	.1290-01	.1754-03	.1429-03	.1980-03	.9100-01	1.188	542.9
5	3.0000	.40000	64.000	.8400-02	.6800-02	.9500-02	.1293-03	.1053-03	.1459-03	.5700-01	.8760	542.6
5	3.0000	.42500	65.000	.6700-02	.5500-02	.7600-02	.1034-03	.8424-04	.1107-03	.5300-01	.7020	542.1

(RVJ001)

ORBITER FUSELAGE PORT SIDE

04-74 (AEDC V418-B8A) HEATING DATA IN ORBITER FUSELAGE PORT SIDE

04-74 (AEDC V418-B8A) 862C12F10M16M127E52V8R19

RUN NL PER	TRA	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H(TO) BTU/ R FT2SEC	H (TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	FW DEG. R
5	4.0000	.45000	52.000	.5100-02	.4100-02	.5700-02	.7781-04	.8780-04	.4000-01	.5220	541.7
5	4.0000	.47500	53.000	.3700-02	.3100-02	.4200-02	.5769-04	.6740-04	.3000-01	.3810	541.3
5	4.0000	.50000	54.000	.3700-02	.2500-02	.3400-02	.4634-0	.5229-04	.2400-01	.2980	540.9
5	4.0000	.52500	55.000	.3700-02	.3000-02	.4100-02	.5662-04	.6387-04	.2800-01	.3640	540.6
5	4.0000	.55000	56.000	.3700-02	.2900-02	.4000-02	.5479-04	.6180-04	.2800-01	.3340	540.5
5	4.0000	.60000	57.000	.3700-02	.1600-02	.2200-02	.2965-04	.3344-04	.1500-01	.1740	539.8
5	4.0000	.65000	58.000	.3700-02	.1200-02	.1500-02	.2175-04	.2434-04	.1100-01	.1330	539.5
5	4.0000	.70000	59.000	.3700-03	.4000-03	.6000-03	.7900-05	.8909-05	.4000-02	.4600-01	539.6
5	4.0000	.75000	60.000	.1700-02	.1400-02	.1900-02	.2773-04	.2901-04	.1300-01	.1500	538.5
5	4.0000	.80000	61.000	.5000-03	.4000-03	.5000-03	.7172-05	.8087-05	.4000-02	.4500-01	539.1
5	4.0000	.85000	62.000	.3000-03	.3000-03	.3000-03	.4738-05	.5342-05	.2000-02	.3200-01	538.5
5	4.0000	.90000	63.000	.1400-02	.1100-02	.1600-02	.2156-04	.2431-04	.1100-01	.1460	538.9
5	4.0000	.92500	64.000	.1300-02	.1100-02	.1500-02	.1991-04	.2245-04	.1000-01	.1290	538.9
5	4.0000	.95000	65.000	.1600-02	.1300-02	.1800-02	.2458-04	.2772-04	.0000	.0000	533.3

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 16

OH-74 (.DC V41B-BBA) B62C12F10M16W127E52V8R19

(RVE001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	Y DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
6	7.880	43.84	85.10	1177.	180.0	.0000	87.70	.1007 01	.4180	3616.	.9200-05	.7052-07

RUN NUMBER	RN/L	REF BTU/ R F ² SEC /FT	STN NO R=
6	.711	.1511-01	.5906-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H/HREF BTU/ R F ² SEC	H/HREF BTU/ R F ² SEC	H/HREF BTU/ R F ² SEC	H/HREF BTU/ R F ² SEC	QDOT BTU/ F ² SEC	DT/DT DEG R /SEC	TW DEG. R
6	1.000	.27500	1.0000	.1340-01	.1090-01	.1510-01	.2091-03	.1704-03	.2358-03	.1080	126	540.5	
6	1.000	.30000	2.0000	.1280-01	.1040-01	.1440-01	.1997-03	.1628-03	.2253-03	.1040	1.101	540.7	
6	1.000	.32500	3.0000	.1230-01	.1000-01	.1390-01	.1919-03	.1564-03	.2165-03	.1000+03	1.024	540.5	
6	1.000	.35000	4.0000	.1170-01	.0910-01	.1220-01	.3070-03	.2507-03	.3470-03	.1500	1.656	540.8	
6	1.000	.37500	5.0000	.1130-01	.0870-01	.1180-01	.3012-03	.2455-03	.3398-03	.1560	1.642	541.4	
6	1.000	.40000	6.0000	.1070-01	.0820-01	.1120-01	.2916-03	.2375-03	.3289-03	.1510	1.564	541.0	
6	1.000	.42500	7.0000	.1020-01	.0770-01	.1070-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.45000	8.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.47500	9.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.50000	10.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.52500	11.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.55000	12.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.57500	13.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.60000	14.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.62500	15.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.65000	16.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.67500	17.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.70000	18.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.72500	19.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.75000	20.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.77500	21.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	
6	1.000	.80000	22.0000	.1000-01	.0750-01	.1050-01	.2891-03	.2356-03	.3262-03	.1500	1.534	541.0	

OH-74 (ALOC 1418-863) HEATING DATA ON ORBITER FUSELAGE PORT SIDE.

CH AEDC V41B-BRA) 35' C12F10M,6W:27E92V8R19

Run Number	TRA	X	T/C NO	WAVELENGTH	REF R=1.0	H/REF R=TAN	19T0 5TU/ R	HITJ RTU/ R	HITAH RTSEC	ODOT B°U/ R	ODHOT DEG. R	TW DEG. R
5	2.000	53000	23 000	19.00-02	7700-02	1073-01	1479-03	1206-03	1669-03	7700-01	9570	540.3
6	2.000	56700	24 000	18200-02	6700-02	920-02	1274-03	1038-03	1436-03	6600-01	7210	539.6
6	2.000	66000	25 000	15400-02	4400-02	6100-02	849-01	6825-04	9575-04	4400-01	4810	539.1
6	2.000	67000	26 000	16000-02	5100-02	3000-02	4091-04	3337-04	4612-04	2100-01	2320	538.4
6	2.000	70500	27 000	14000-02	1100-02	1500-02	2127-04	1736-04	2398-04	1100-01	1200	537.6
6	2.000	75000	28 000	1700-02	1400-02	1900-02	2605	2130-04	2941-04	1400-01	1500	537.0
6	2.000	80000	29 000	1000-02	9000-03	1100-03	1529-04	1247-04	1723-04	8000-02	4800-01	537.3
6	2.000	82400	30 000	1000-03	3000-03	5000-03	6570-04	5355-05	7413-05	3000-02	8900-01	527.8
6	3.000	120000	31 000	2700-01	2410-01	3340-01	4613-03	3757-03	5717-03	2390	2.569	542.9
6	3.000	122500	32 000	2560-01	2490-01	2890-01	3957-03	3261-03	4506-03	2070	2.317	541.7
6	3.000	125000	33 000	2630-01	1710-01	2350-01	3249-03	2751-03	3688-03	1690	1.898	541.3
6	3.000	127500	34 000	1710-01	1390-01	1930-01	2661-03	2217-03	3010-03	1380	1.661	540.6
6	3.000	13000	35 000	1900-01	1550-01	2140-01	2959-03	2217-03	3338-03	1540	1.904	540.5
6	3.000	132500	36 000	2500-01	2040-01	2820-01	3898-03	3111-03	4395-03	2020	2.375	540.5
6	3.000	135000	37 000	2120-01	1730-01	2390-01	3312-03	2700-03	3736-03	1720	1.919	540.4
6	3.000	137500	38 000	1990-01	1620-01	2250-01	3111-03	2535-03	3509-03	1510	1.895	540.6
6	3.000	140000	39 000	400-01	1140-01	1580-01	2183-03	1779-03	2462-03	1130	1.339	539.8
6	3.000	142500	40 000	11260-01	1030-01	1420-01	1964-03	1501-02	2215-03	1020	1.212	539.5
6	3.000	145000	41 000	1130-01	920-02	1270-01	1764-03	1479-03	1995-03	9200-01	1.050	539.9
6	3.000	147500	42 000	1800-02	6000-02	9100-02	1267-03	1033-03	1429-03	6500-01	7350	539.6
6	3.000	15000	43 000	7500-02	6200-02	8500-02	1177-03	9500-04	1328-03	6100-01	6830	539.6
6	3.000	152500	44 000	6100-02	5000-02	6900-02	9536-04	7817-04	1081-03	5000-01	5860	539.0
6	3.000	155000	45 000	5600-02	4600-02	6400-02	8801-04	7178-04	9323-04	4600-01	5120	538.7
6	3.000	160000	46 000	4000-02	3300-02	4500-02	6226-04	5078-04	7018-04	3200-01	3540	538.2
6	3.000	165000	47 000	6700-02	1800-02	2500-02	3491-04	2848-04	3931-04	1800-01	1940	537.6
6	3.000	170000	48 000	1300-02	1000-02	1400-02	1955-04	1596-04	2204-04	1000-01	1130	537.2
6	3.000	175000	49 000	1500-02	1200-02	1700-02	2341-04	1910-04	2685-04	1200-01	1360	536.9
6	3.000	180000	50 000	1500-02	1200-02	1700-02	2341-04	1910-04	2685-04	1200-01	1310	537.1
6	3.000	185000	51 000	5000-03	3000-03	6000-03	8008-05	6332-05	1118-05	4000-02	5200-01	538.3
6	3.000	190000	52 000	9000-03	7000-03	1000-02	1341-04	1094-04	1512-04	7000-02	9800-01	538.5
6	3.000	195000	53 000	9000-03	7000-03	1000-02	1341-04	1094-04	1512-04	7000-02	9800-01	538.5
6	3.000	20000	54 000	1200-02	1100-02	1600-02	2189-04	1785-04	2467-04	1100-01	1160	539.6
6	3.000	20500	55 000	3200-01	2670-01	3710-01	5127-03	4172-03	5790-03	2640	3.010	545.2
6	4.000	21000	56 000	2500-01	2130-01	2950-01	4092-03	3331-03	4610-03	2110	2.474	543.7
6	4.000	21500	57 000	2400-01	1950-01	2700-01	3740-03	3045-03	4222-03	1930	2.263	543.4
6	4.000	22000	58 000	2200-01	1790-01	2490-01	3438-03	2900-03	3990-03	1770	2.198	543.1
6	4.000	22500	59 000	2150-01	1750-01	2420-01	3351-03	2731-03	3781-03	1740	2.178	541.3
6	4.000	23000	60 000	2000-01	1600-01	2060-01	2850-03	2322-03	3244-03	1480	1.936	541.6
6	4.000	23500	61 000	1930-01	1490-01	1570-01	2166-03	1765-03	2443-03	120	1.473	541.0
6	4.000	24000	62 000	1390-01	1130-01	1130-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	24500	63 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	25000	64 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	25500	65 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	26000	66 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	26500	67 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	27000	68 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	27500	69 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	28000	70 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	28500	71 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	29000	72 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	29500	73 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	30000	74 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	30500	75 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	31000	76 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	31500	77 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	32000	78 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	32500	79 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	33000	80 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	33500	81 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	34000	82 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	34500	83 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	35000	84 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	35500	85 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	36000	86 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	36500	87 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	37000	88 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	37500	89 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	38000	90 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	38500	91 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	39000	92 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	39500	93 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	40000	94 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	40500	95 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	41000	96 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	41500	97 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	42000	98 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	42500	99 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4
6	4.000	43000	100 000	1070-01	8700-02	1210-01	1673-03	1353-03	1897-03	9700-01	1.139	540.4

DATE 07 OCT 75

OH-74 (AEDC V419-BB) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 18

OH-74 (AEDC V419-BB) B62C12F10H18M127E52V8R19

(RVB001)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(14H) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TH DEG. R
6	4.0000	.47500	63.000	.4700-02	.3900-02	.5300-02	.7389-04	.6025-04	.8372-04	.3800-01	.4900	539.4
6	4.0000	.50000	64.000	.3600-02	.2900-02	.4000-02	.5571-04	.4543-04	.5282-04	.2900-01	.3590	539.3
6	4.0000	.52500	65.000	.3500-02	.2900-02	.3700-02	.5467-04	.4458-04	.6165-04	.2900-01	.3530	539.3
6	4.0000	.55000	66.000	.2900-02	.2400-02	.3400-02	.4498-04	.3688-04	.5072-04	.2300-01	.2750	539.1
6	4.0000	.60000	67.000	.1400-02	.1200-02	.1600-02	.2205-04	.1799-04	.2486-04	.1100-01	.1300	538.4
6	4.0000	.65000	68.000	.1000-02	.8000-03	.1200-02	.1606-04	.1310-04	.1810-04	.8000-02	.9600-01	538.3
6	4.0000	.70000	69.000	.1200-02	.1000-02	.1300-02	.1851-04	.1510-04	.2097-04	.1000-01	.1080	538.5
6	4.0000	.75000	70.000	.1800-02	.1400-02	.2000-02	.2755-04	.2248-04	.3105-04	.1400-01	.1610	537.3
6	4.0000	.80000	73.000	.1100-02	.9000-03	.1200-02	.1707-04	.1393-04	.1925-04	.9000-02	.1080	537.8
6	4.0000	.87500	77.000	.1500-02	.1200-02	.1700-02	.2351-04	.1919-04	.2650-04	.1200-01	.1610	537.3
6	4.0000	.90000	78.000	.3100-02	.2500-02	.3400-02	.4765-04	.3887-04	.5371-04	.2500-01	.3230	537.9
6	4.0000	.92500	79.000	.1500-02	.1200-02	.1700-02	.2377-04	.1939-04	.2680-04	.1200-01	.1540	538.3
6	4.0000	.95000	80.000	.1600-02	.1300-02	.1800-02	.2458-04	.2005-04	.2772-04	.0000	.0010	583.3

DATE 07

01-74 (A) 10 V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 19

01-74 (A) 10 V418-88A) B62C12F10H16H127E52V8R19

(H-18001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
16	7.940	19.71	190.2	1242.	180.0	.0000	91.30	.2000-01	.9030	3717.	.1881-04	.7348-07

RUN NUMBER	RN/L	HREF BTU/ R	57: NO R=
16	.9514	.2315-01	.4154-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=1.0	H(9TO) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(11A) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTWDT DEG. R /SEC	TH DEG. R
16	1.0000	.27500	1.0000	.1300-01	.1070-01	.1460-01	.3017-03	.2482-03	.3392-03	.1740	1.801	542.2
16	1.0000	.30000	2.0000	.1070-01	.8800-02	.1200-01	.2473-03	.2034-03	.2772-03	.1420	1.512	542.0
16	1.0000	.32500	3.0000	.6100-02	.8100-02	.1100-01	.2276-03	.1872-03	.2551-03	.1310	1.349	541.4
16	1.0000	.35000	4.0000	.9100-02	.7500-02	.1020-01	.2102-03	.1729-03	.2355-03	.1210	1.258	540.9
16	1.0000	.37500	5.0000	.8200-02	.6700-02	.9100-02	.1887-03	.1553-03	.2115-03	.1090	1.145	541.2
16	1.0000	.40000	6.0000	.9600-02	.7900-02	.1070-01	.2217-03	.1824-03	.2484-03	.1280	1.315	540.8
16	1.0000	.42500	7.0000	.8500-02	.7400-02	.1000-01	.2069-03	.1703-03	.2319-03	.1190	1.239	540.8
16	1.0000	.45000	8.0000	.1130-01	.9300-02	.1270-01	.2615-03	.2152-03	.2930-03	.1510	1.544	540.8
16	1.0000	.47500	9.0000	.1480-01	.1220-01	.1660-01	.3422-03	.2815-03	.3835-03	.1970	2.009	541.3
16	1.0000	.50000	10.000	.1680-01	.1330-01	.1880-01	.3930-03	.3201-03	.4359-03	.2240	2.277	540.7
16	1.0000	.52500	11.000	.1760-01	.1450-01	.1980-01	.4082-03	.3359-03	.4575-03	.2350	2.389	540.8
16	1.0000	.55000	12.000	.1850-01	.1520-01	.2070-01	.4275-03	.3518-03	.4790-03	.2470	2.481	540.6
16	1.0000	.60000	13.000	.2450-01	.2050-01	.2800-01	.5775-03	.4751-03	.6473-03	.3330	3.374	541.7
16	1.0000	.65000	14.000	.4280-01	.3520-01	.4800-01	.9910-03	.8150-03	.1111-02	.5700	5.774	542.8
16	1.0000	.70000	15.000	.5050-01	.4150-01	.5660-01	.1169-02	.9606-03	.1311-02	.5700	6.545	544.5
16	1.0000	.75000	16.000	.5340-01	.2750-01	.3740-01	.7732-03	.6351-03	.8666-03	.4450	4.516	541.7
16	1.0000	.80000	17.000	.1470-01	.1210-01	.1650-01	.3401-03	.2799-03	.3811-03	.1960	1.505	540.5
16	2.0000	.29500	18.000	.1190-01	.9700-02	.1320-01	.2734-03	.2248-03	.3075-03	.1570	1.345	542.7
16	2.0000	.33700	19.000	.1050-01	.8600-02	.1180-01	.2428-03	.1997-03	.2721-03	.1400	1.648	542.3
16	2.0000	.39000	20.000	.1140-01	.9400-02	.1280-01	.2639-03	.2170-03	.2957-03	.1520	1.793	541.9
16	2.0000	.42600	21.000	.1600-01	.1320-01	.1800-01	.3714-03	.3055-03	.4162-03	.2140	2.512	541.7
16	2.0000	.47800	22.000	.2420-01	.1970-01	.2590-01	.5546-03	.4562-03	.6218-03	.3190	3.557	542.5

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 20

CH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

DATE 07 OCT 75

(RVB001)

CH-74 (AEDC V41B-BBA) 862C12F10M16M127E52V8R19

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	LTWOT DEG. R /SEC	TH DEG. R
15	2.0000	53000	23.000	.3550-01	.2920-01	.3980-01	.8226-03	.6763-03	.9222-03	.4730	5.266	543.3
16	2.0000	56700	24.000	.4900-01	.4030-01	.5500-01	.1135-02	.9324-03	.1273-02	.6500	7.059	545.0
16	2.0000	62000	25.000	.5320-01	.4370-01	.5970-01	.1231-02	.1012-02	.1381-02	.7050	7.661	545.0
16	2.0000	67000	26.000	.2880-01	.2370-01	.3230-01	.6666-03	.5484-03	.7471-03	.3840	4.181	541.4
16	2.0000	70500	27.000	.1910-01	.1570-01	.2140-01	.4428-03	.3644-03	.4962-03	.2560	2.755	540.5
16	2.0000	75000	28.000	.1260-01	.1040-01	.1410-01	.2917-03	.2401-03	.3268-03	.1690	1.855	539.6
16	2.0000	80000	29.000	.1000-01	.8300-02	.1120-01	.2324-03	.1914-03	.2604-03	.1350	1.487	539.1
16	2.0000	82400	30.000	.3300-02	.2700-02	.3700-02	.7548-04	.6215-04	.8455-04	.4400-01	.6100	538.7
16	3.0000	20000	31.000	.2850-01	.2340-01	.3190-01	.6592-03	.5417-03	.7394-03	.4.002	4.002	545.3
16	3.0000	22500	32.000	.2160-01	.1780-01	.2420-01	.5002-03	.4111-03	.5610-03	.2870	3.208	544.7
16	3.0000	25000	33.000	.1630-01	.1340-01	.1830-01	.3771-03	.3100-03	.4228-03	.2160	2.424	543.7
16	3.0000	27500	34.000	.1250-01	.1030-01	.1400-01	.2891-03	.2377-03	.3241-03	.1660	1.990	543.3
16	3.0000	30000	35.000	.1090-01	.9000-02	.1220-01	.2524-03	.2075-03	.3058-03	.1450	1.797	542.7
16	3.0000	32500	36.000	.1180-01	.9700-02	.1320-01	.2728-03	.2243-03	.3029-03	.1570	1.841	542.7
16	3.0000	37.000	37.000	.1230-01	.1010-01	.1370-01	.2839-03	.2335-03	.3183-03	.1630	1.897	542.5
16	3.0000	37500	38.000	.1330-01	.1090-01	.1490-01	.3082-03	.2535-03	.3454-03	.1770	2.083	541.9
16	3.0000	40000	39.000	.2110-01	.1730-01	.2760-01	.4881-03	.4015-03	.5472-03	.2810	3.314	542.3
16	3.0000	42500	40.000	.2820-01	.2320-01	.3170-01	.6539-03	.5377-03	.7332-03	.3760	4.452	543.5
16	3.0000	45000	41.000	.3220-01	.2640-01	.3610-01	.7444-03	.6121-03	.8347-03	.4280	4.888	543.3
16	3.0000	47500	42.000	.3950-01	.3250-01	.4430-01	.9151-03	.7522-03	.1026-02	.5250	5.844	544.4
16	3.0000	50000	43.000	.5270-01	.4330-01	.5910-01	.1219-02	.1402-02	.1368-02	.6970	7.757	546.1
16	3.0000	52500	44.000	.5640-01	.4800-01	.6550-01	.1352-02	.1111-02	.1516-02	.7730	9.062	545.6
16	3.0000	55000	45.000	.4790-01	.3940-01	.5370-01	.1109-02	.9111-03	.1244-02	.6370	7.567	545.2
16	3.0000	60000	46.000	.2320-01	.1910-01	.2600-01	.5372-03	.4420-03	.6021-03	.3100	3.370	541.4
16	3.0000	65000	47.000	.1550-01	.1270-01	.1730-01	.3582-03	.2948-03	.4014-03	.2070	2.200	540.0
16	3.0000	70000	48.000	.1040-01	.8600-02	.1170-01	.2415-03	.1988-03	.2706-03	.1400	1.544	539.4
16	3.0000	75000	49.000	.8200-02	.6800-02	.9200-02	.1906-03	.1569-03	.2135-03	.1100	1.202	539.0
16	3.0000	80000	50.000	.7500-02	.6200-02	.8400-02	.1737-03	.1431-03	.1946-03	.1010	1.061	538.7
16	3.0000	85000	51.000	.7400-02	.6100-02	.8300-02	.1708-03	.1406-03	.1913-03	.9900-01	1.227	538.8
16	3.0000	87500	52.000	.8100-02	.6700-02	.9100-02	.1875-03	.1543-03	.2101-03	.1080	1.243	540.0
16	3.0000	90000	53.000	.7700-02	.6300-02	.8600-02	.1786-03	.1470-03	.2001-03	.1030	1.436	540.5
16	3.0000	92500	54.000	.9400-02	.7800-02	.1060-01	.2181-03	.1795-03	.2444-03	.1260	1.653	540.5
16	3.0000	95000	55.000	.9200-02	.7600-02	.1030-01	.2138-03	.1760-03	.2396-03	.1240	1.254	540.0
16	4.0000	20000	71.000	.3470-01	.2950-01	.3890-01	.8035-03	.6598-03	.9017-03	.4580	5.224	547.7
16	4.0000	22500	72.000	.2680-01	.2200-01	.3010-01	.6210-03	.5102-03	.6967-03	.3550	4.159	546.1
16	4.0000	25000	73.000	.2050-01	.1690-01	.2300-01	.4750-03	.3903-03	.4269-03	.2720	3.184	545.6
16	4.0000	27500	74.000	.1640-01	.1350-01	.1840-01	.3806-03	.3129-03	.4269-03	.2180	2.700	544.6
16	4.0000	30000	75.000	.1350-01	.1120-01	.1520-01	.3143-03	.2584-03	.3574-03	.1800	2.365	543.6
16	4.0000	32500	76.000	.1570-01	.1290-01	.1760-01	.3636-03	.2989-03	.4077-03	.2090	2.736	543.6
16	4.0000	35000	77.000	.2550-01	.2090-01	.2860-01	.5900-03	.4849-03	.6617-03	.3380	4.432	544.5
16	4.0000	37500	78.000	.4170-01	.3430-01	.4680-01	.9663-03	.7938-03	.1084-03	.5520	7.228	546.4
16	4.0000	40000	80.000	.5350-01	.4390-01	.6000-01	.1238-02	.1017-02	.1390-02	.7070	9.244	547.3
16	4.0000	42500	81.000	.4720-01	.3880-01	.5300-01	.1093-02	.8982-03	.1277-02	.6250	8.170	546.4

(FV8001)

04-74 (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

04-74 (AEDC V418-88A) B62C12F10M1E4127E52V8R19

DATE OF TEST

RUN NUMBER	TRAPE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/FT2SEC	H1T01 BTU/FT2SEC	H1TAR BTU/FT2SEC	QDOT BTU/FT2SEC	DTWOT DEG/R	TH DEG/R
16	4.0000	.45000	62.000	.363-01	.2960-01	.4040-01	.8341-03	.6955-03	.9356-03	.4780	6.185	545.0
16	4.0000	.47500	63.000	.2600-01	.2130-01	.2910-01	.5008-03	.4940-03	.6737-03	.3450	4.393	543.0
16	4.0000	.50000	64.000	.1770-01	.1460-01	.1990-01	.4107-03	.3378-03	.4603-03	.2360	2.928	542.0
16	4.0000	.52500	65.000	.1460-01	.1200-01	.1630-01	.3376-03	.2778-03	.3784-03	.1950	2.411	541.7
16	4.0000	.55000	66.000	.1120-01	.9200-02	.1260-01	.2600-03	.2139-03	.2913-03	.1500	1.760	541.2
16	4.0000	.60000	67.000	.8400-02	.6900-02	.9400-02	.1935-03	.1593-03	.2168-03	.1120	1.262	539.7
16	4.0000	.65000	68.000	.7100-02	.5800-02	.8000-02	.1643-03	.1353-03	.1841-03	.9500-01	1.117	539.5
16	4.0000	.70000	69.000	.5600-02	.4600-02	.6300-02	.1298-03	.1068-03	.1454-02	.7500-01	.8370	539.3
16	4.0000	.75000	70.000	.5200-02	.4700-02	.5900-02	.1215-03	.1000-03	.1361-03	.7000-01	.7850	539.2
16	4.0000	.80000	75.000	.2200-02	.1130-02	.2400-02	.4997-04	.4114-04	.5598-04	.2900-01	.3490	539.1
16	4.0000	.85000	76.000	.7000-03	.6000-03	.8000-03	.1663-04	.1370-04	.1863-04	.1000-01	.1140	538.5
16	4.0000	.87500	77.000	.2000-02	.1600-02	.2200-02	.4634-04	.3816-04	.5190-04	.2700-01	.3530	538.3
16	4.0000	.90000	78.000	.2500-02	.2100-02	.2800-02	.5830-04	.4801-04	.6531-04	.3400-01	.4390	538.5
16	4.0000	.92500	79.000	.2800-02	.2300-02	.3100-02	.6452-04	.5312-04	.7228-04	.3700-01	.4620	539.1
16	4.0000	.95000	80.000	.1700-02	.1400-02	.1900-02	.3984-04	.3281-04	.4462-04	.2300-01	.2710	538.4

(RVB301)

OH-74 (AEDC V-1B-88A) B62C12F10M16H127E52VBR19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .000J MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
17	7.940	24.85	190.3	1247.	180.0	.0000	91.60	.2000-01	.9030	3724.	.1874-04	.7377-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R .0175
17	.9461	.2317-01	.4163-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(STO) BTU/ R FT ² SEC	H(TOI) BTU/ R FT ² SEC	H(TAH) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTMDT DEG. R /SEC	TH DEG. R
17	1.0000	.27500	1.0000	.1450-01	.1200-01	.1630-01	.3364-03	.2770-03	.3768-03	.1960	2.030	540.9
17	1.0000	.30000	2.0000	.1130-01	.9300-02	.1270-01	.2620-03	.2157-03	.2934-03	.1520	1.619	540.6
17	1.0000	.32500	3.0000	.1030-01	.8500-02	.1150-01	.2383-03	.1963-03	.2669-03	.1390	1.427	540.0
17	1.0000	.35000	4.0000	.1050-01	.8600-02	.1170-01	.2431-03	.2002-03	.2723-03	.1420	1.470	540.0
17	1.0000	.37500	5.0000	.1030-01	.8500-02	.1160-01	.2396-03	.1973-03	.2684-03	.1390	1.468	540.5
17	1.0000	.40000	6.0000	.1150-01	.9500-02	.1290-01	.2667-03	.2196-03	.2987-03	.1550	1.597	540.2
17	1.0000	.42500	7.0000	.1430-01	.1180-01	.1600-01	.3309-03	.2725-03	.3706-03	.1920	1.998	540.6
17	1.0000	.45000	8.0000	.1920-01	.1580-01	.2150-01	.4459-03	.3671-03	.4994-03	.2590	2.653	541.0
17	1.0000	.47500	9.0000	.2160-01	.1580-01	.2150-01	.4439-03	.3655-03	.4972-03	.2580	2.628	541.2
17	1.0000	.50000	10.000	.2160-01	.1780-01	.2420-01	.5002-03	.4118-03	.5603-03	.2910	2.947	541.2
17	1.0000	.52500	11.000	.3270-01	.2650-01	.5650-01	.7576-03	.6235-03	.8488-03	.4400	4.455	542.1
17	1.0000	.55000	12.000	.4000-01	.3290-01	.4480-01	.9252-03	.7611-03	.1037-02	.5370	5.397	542.8
17	1.0000	.60000	13.000	.3590-01	.3740-01	.4480-01	.9252-03	.7611-03	.1037-02	.5350	5.417	544.1
17	1.0000	.65000	14.000	.1910-01	.1590-01	.2140-01	.4436-03	.3652-03	.4969-03	.2580	2.613	541.4
17	1.0000	.70000	15.000	.1080-01	.4900-02	.1210-01	.2499-03	.2058-03	.2799-03	.1450	1.423	540.5
17	1.0000	.75000	16.000	.1030-01	.8400-02	.1150-01	.2375-03	.1957-03	.2660-03	.1380	1.405	539.5
17	1.0000	.80000	17.000	.4900-02	.4100-02	.5500-02	.1142-03	.9411-04	.1279-03	.6700-01	.6460	539.7
17	1.0000	.85000	18.000	.1390-01	.1150-01	.1560-01	.3229-03	.2659-03	.3670-03	.1880	2.207	540.5
17	1.0000	.90000	19.000	.1260-01	.1030-01	.1410-01	.2908-03	.2395-03	.3258-03	.1690	1.997	540.7
17	1.0000	.95000	20.000	.1790-01	.1470-01	.2000-01	.4139-03	.3408-03	.4637-03	.2410	2.842	540.9
17	1.0000	.42500	21.000	.2630-01	.2170-01	.2950-01	.6102-03	.5022-03	.6836-03	.3540	4.156	542.0
17	1.0000	.47800	22.000	.4410-01	.3630-01	.4940-01	.1022-02	.8406-03	.1145-02	.5910	6.583	544.0

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 23

(RV90011)

OH-74 (AEDC V41B-B8A) B62C12F10H16W127E52V8R19

KUN NUMBER	TRAJL	X/L	T/C NO	H/HREF P=0.9	H/HREF R=1.0	H/HREF R=TAN	H(19T) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TH DEG. R
17	2.0000	.53000	23.000	.414-01	.3410-01	.4640-01	.9527-03	.7893-03	.1076-02	.5540	6.174	544.8
17	2.0000	.56700	24.000	.2140-01	.1760-01	.2400-01	.4958-03	.4081-03	.5585-03	.2880	3.130	542.0
17	2.0000	.62000	25.000	.1320-01	.1090-01	.1480-01	.3054-03	.2515-03	.3421-03	.1770	1.932	541.2
17	2.0000	.67000	26.000	.1150-01	.9500-02	.1290-01	.2674-03	.2202-03	.2994-03	.1560	1.697	539.7
17	2.0000	.70500	27.000	.9000-02	.7400-02	.1010-01	.2083-03	.1716-03	.2332-03	.1210	1.311	539.1
17	2.0000	.75000	28.000	.5300-02	.4400-02	.5900-02	.1227-03	.1011-03	.1373-03	.7200-01	.7880	538.8
17	2.0000	.80000	29.000	.3500-02	.2900-02	.3900-02	.8143-04	.6710-04	.9116-04	.4800-01	.5260	538.5
17	2.0000	.82400	30.000	.1100-02	.9000-03	.1200-02	.2459-04	.2026-04	.2782-04	.1400-01	.2000	538.3
17	3.0000	.20000	31.000	.2900-01	.2380-01	.3250-01	.6709-03	.5518-03	.7521-03	.3880	4.112	544.5
17	3.0000	.22500	32.000	.2370-01	.1950-01	.2650-01	.5488-03	.4515-03	.6151-03	.3170	3.555	543.8
17	3.0000	.25000	33.000	.1920-01	.1730-01	.2150-01	.4452-03	.3665-03	.4988-03	.2580	2.895	542.0
17	3.0000	.2500	34.000	.1450-01	.1200-01	.1630-01	.3367-03	.2773-03	.3772-03	.1960	2.349	540.8
17	3.0000	.30000	35.000	.1270-01	.1040-01	.1420-01	.2932-03	.2415-03	.3284-03	.1710	2.117	540.1
17	3.0000	.32500	36.000	.1340-01	.1100-01	.1500-01	.3095-03	.2549-03	.3466-03	.1800	2.117	540.1
17	3.0000	.35000	37.000	.1540-01	.1270-01	.1720-01	.3567-03	.2938-03	.3995-03	.2080	2.413	540.3
17	3.0000	.37500	38.000	.2560-01	.2110-01	.2870-01	.5942-03	.4992-03	.6656-03	.3450	4.055	541.1
17	3.0000	.40000	39.000	.3140-01	.2590-01	.3520-01	.7285-03	.5996-03	.8182-03	.4230	4.987	542.1
17	3.0000	.42500	40.000	.4400-01	.3620-01	.5200-01	.1075-02	.8844-03	.1205-02	.6220	7.100	544.2
17	3.0000	.45000	41.000	.4540-01	.3820-01	.5432-01	.1019-02	.8380-03	.1142-02	.5890	6.972	544.7
17	3.0000	.47500	42.000	.3850-01	.3180-01	.4330-01	.8947-03	.7360-03	.1003-02	.5180	5.766	533.8
17	3.0000	.50000	43.000	.2620-01	.2160-01	.2940-01	.6082-03	.5006-03	.6815-03	.3530	3.931	542.5
17	3.0000	.52500	44.000	.1550-01	.1280-01	.1740-01	.3602-03	.2966-03	.4035-03	.2690	2.460	540.8
17	3.0000	.55000	45.000	.1260-01	.1030-01	.1410-01	.2908-03	.2395-03	.3258-03	.1890	1.887	540.8
17	3.0000	.60000	46.000	.9000-02	.7400-02	.1010-01	.2091-03	.1722-03	.2342-03	.1220	1.227	539.8
17	3.0000	.65000	47.000	.7000-02	.5800-02	.7900-02	.1630-03	.1343-03	.1825-03	.9500-01	1.010	539.4
17	3.0000	.70000	48.000	.4800-02	.3900-02	.5300-02	.1105-03	.9103-04	.1237-03	.6400-01	.7130	538.7
17	3.0000	.75000	49.000	.3100-02	.2600-02	.3500-02	.7227-04	.5955-04	.8000-04	.4200-01	.4600	538.2
17	3.0000	.80000	50.000	.9000-03	.7300-03	.1000-02	.2091-04	.1723-04	.2341-04	.1200-01	.1210	537.6
17	3.0000	.85000	51.000	.3900-02	.3200-02	.4300-02	.8891-04	.7328-04	.9954-04	.5200-01	.6450	539.1
17	3.0000	.87500	52.000	.3500-02	.3000-02	.4100-02	.8425-04	.6940-04	.9433-04	.4900-01	.6090	539.3
17	3.0000	.90000	53.000	.4400-02	.3600-02	.4900-02	.1038-03	.8306-04	.1129-03	.5900-01	.8190	540.0
17	3.0000	.92500	54.000	.4100-02	.3400-02	.4600-02	.9531-04	.7850-04	.1087-03	.5600-01	.7290	539.9
17	3.0000	.95000	55.000	.3600-02	.2900-02	.4000-02	.8253-04	.6799-04	.9241-04	.4800-01	.4890	539.1
17	4.0000	.20000	71.000	.7700-01	.3360-01	.4170-01	.8625-03	.7088-03	.9575-03	.4950	5.556	547.4
17	4.0000	.22500	72.000	.2700-01	.2200-01	.3020-01	.6250-03	.5140-03	.7007-03	.3510	4.229	544.9
17	4.0000	.25000	73.000	.1840-01	.1510-01	.2550-01	.4257-03	.3503-03	.5913-03	.7050	3.577	544.0
17	4.0000	.27500	74.000	.1610-01	.1330-01	.1810-01	.735-03	.3075-03	.4175-03	.2170	3.051	543.4
17	4.0000	.30000	55.000	.2700-01	.2200-01	.3030-01	.150-03	.5151-03	.7015-03	.3630	2.843	542.2
17	4.0000	.32500	57.000	.4160-01	.3420-01	.4660-01	.9637-03	.7923-03	.1081-02	.5560	7.755	543.0
17	4.0000	.35000	58.000	.3860-01	.3190-01	.4330-01	.8954-03	.7384-03	.1004-02	.5170	6.776	545.8
17	4.0000	.37500	59.000	.2400-01	.1970-01	.2690-01	.5551-03	.4576-03	.6231-03	.3820	4.228	542.6
17	4.0000	.40000	60.000	.1570-01	.1290-01	.1760-01	.3645-03	.3030-03	.4083-03	.2120	2.775	541.7

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 24

OH-75 (AEDC V41D-88A) 862C12F10M16M127E52VBR19

(RV8001)

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1(TOI) BTU/ R FT2SEC	H1(TOI) BTU/ R FT2SEC	H1(TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
17	4.0000	.45000	38.000	.1140-01	.9400-02	.1280-01	.2845-03	.2178-03	.2983-03	.1540	1.993	541.4
17	4.0000	.47500	63.000	.8900-02	.7300-02	.9900-02	.2052-03	.169C-03	.2299-03	.1190	1.521	540.9
17	4.0000	.50000	84.000	.7600-02	.6200-02	.8500-02	.1754-03	.1444-03	.1964-03	.1020	1.265	540.4
17	4.0000	.52500	65.000	.6700-02	.5600-02	.7600-02	.1563-03	.1287-03	.1750-03	.9100-01	1.128	540.3
17	4.0000	.53000	66.000	.6300-02	.5200-02	.7000-02	.1458-03	.1201-03	.1633-03	.8500-01	.9970	540.0
17	4.0000	.60000	67.000	.4200-02	.3400-02	.4700-02	.9683-04	.7977-04	.1084-03	.5600-01	.6370	539.3
17	4.0000	.65000	68.000	.3000-02	.2500-02	.3400-02	.6974-04	.5745-04	.7808-04	.4100-01	.4780	539.1
17	4.0000	.70000	69.000	.2400-02	.1900-02	.2600-02	.5470-04	.4506-04	.6126-04	.3200-01	.3560	539.4
17	4.0000	.75000	70.000	.1600-02	.1300-02	.1700-02	.3616-04	.2980-04	.4049-04	.2100-01	.2350	538.1
17	4.0000	.80000	75.000	.2000-03	.1070-03	.2000-03	.3796-05	.3128-05	.4250-05	.2000-02	.2700-01	536.5
17	4.0000	.87500	77.000	.8000-03	.7000-03	.9000-03	.1872-04	.1543-04	.2096-04	.1100-01	.1440	537.8
17	4.0000	.90000	78.000	.9000-03	.8000-03	.1000-02	.2138-04	.1762-04	.2394-04	.1200-01	.1620	539.0
17	4.0000	.92500	79.000	.2000-01	.1700-02	.2200-02	.4652-04	.3833-04	.5208-04	.2700-01	.3370	536.9
17	4.0000	.95000	80.000	.1700-02	.1400-02	.1900-02	.3984-04	.3281-04	.4462-04	.2300-01	.2710	538.4

DATE 07 OCT 75

04-74 (AEDC V41B-23A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 29

OH-74 (AEDC V41B-88A) 882C12F10M16M127E52VBR19

(RV3001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	P-40 SLUGS /FT3	MU LB-SEC /FT2
18	7.940	29.72	189.7	124.9	180.0	.0000	91.80	.2000-01	.9000	3727.	.1865-04	.7389-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175
18	.9409	.2314-01	.4174-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAW	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAW1 BTU/ R FT2SEC	000T BTU/ R FT2SEC	DTJOT DEG. R /SEC	TM DEG. R
18	1.0000	.27500	1.0000	.1260-01	.1030-01	.1410-01	.2907-03	.2394-03	.3255-03	.1700	1.759	541.1
18	1.0000	.30000	2.0000	.1220-01	.1000-01	.1360-01	.2816-03	.2319-03	.3153-03	.1640	1.746	540.7
18	1.0000	.32500	3.0000	.1060-01	.8700-02	.180-01	.2448-03	.2017-03	.2741-03	.1430	1.471	540.1
18	1.0000	.37500	5.0000	.1050-01	.8700-02	.1180-01	.2438-03	.2008-03	.2730-03	.1420	1.497	540.7
18	1.0000	.40000	6.0000	.1810-01	.1490-01	.2030-01	.4187-03	.3448-03	.4689-03	.2440	2.512	540.7
18	1.0000	.42500	7.0000	.2040-01	.1620-01	.2290-01	.4725-03	.3891-03	.5292-03	.2750	2.853	541.5
18	1.0000	.45000	8.0000	.2360-01	.1940-01	.2840-01	.5452-03	.4497-03	.6118-03	.3190	3.254	541.7
18	1.0000	.47500	9.0000	.2660-01	.2190-01	.2980-01	.6155-03	.5075-03	.6906-03	.3590	3.651	542.4
18	1.0000	.50000	10.000	.3540-01	.3000-01	.4080-01	.8433-03	.6941-03	.9448-03	.4900	4.965	542.9
18	1.0000	.52500	11.000	.2810-01	.2310-01	.3150-01	.6908-03	.5357-03	.7292-03	.3780	3.835	542.7
18	1.0000	.55000	12.000	.2340-01	.1930-01	.2620-01	.5420-03	.4463-03	.6072-03	.3160	3.170	541.9
18	1.0000	.60000	13.000	.1480-01	.1220-01	.1660-01	.3421-03	.2817-03	.3831-03	.1990	2.022	541.1
18	1.0000	.65000	14.000	.1240-01	.1020-01	.1390-01	.2853-03	.2358-03	.3205-03	.1670	1.694	540.8
18	1.0000	.70000	15.000	.9100-02	.7500-02	.1010-01	.2057-03	.1729-03	.2348-03	.1220	1.199	540.0
18	1.0000	.75000	16.000	.8000-02	.6600-02	.9000-02	.1852-03	.1526-03	.2073-03	.1080	1.100	536.9
18	1.0000	.80000	17.000	.1600-02	.1300-02	.1800-02	.3654-04	.3212-04	.4091-04	.2100-01	2.080	536.7
18	1.0000	.85000	18.000	.1400-01	.1150-01	.1570-01	.3235-03	.2665-03	.3523-03	.1890	2.218	540.5
18	2.0000	.33700	19.000	.1350-01	.1110-01	.1510-01	.3127-03	.2576-03	.3512-03	.1630	2.156	540.2
18	2.0000	.39000	20.000	.2890-01	.2370-01	.3230-01	.6659-03	.5491-03	.7470-03	.3880	4.583	541.7
18	2.0000	.42600	21.000	.3400-01	.2800-01	.3810-01	.7876-03	.6482-03	.8825-03	.4570	5.364	543.4
18	2.0000	.47800	22.000	.2940-01	.2420-01	.3300-01	.6911-03	.5606-03	.7630-03	.3960	4.415	542.5
18	2.0000	.53000	23.000	.1570-01	.1370-01	.1870-01	.3863-03	.3181-03	.4327-03	.2250	2.510	541.5

DATE 07 OCT 1964 CH-74 (1)EDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RY8001)

CH-74 (1)EDC V41B-88A) 862C12F10H15H127E52V8R19

RUN NUMBER	TRA E	Y	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TW DEG. R
18	4.0000	.4750	62.000	.5000-02	.5000-02	.6700-02	.1392-03	.1147-03	.1559-03	.8100-01	1.037	540.2
18	4.0000	.50000	64.000	.4800-02	.3900-02	.5300-02	.1100-03	.9062-04	.1232-03	.6400-01	.7970	540.0
18	4.0000	.52500	65.000	.4100-02	.3400-02	.4600-02	.9454-04	.7789-04	.1059-03	.5500-01	.6850	539.9
18	4.0000	.55000	66.000	.3900-02	.3200-02	.4400-02	.9100-04	.7498-04	.1019-03	.5300-01	.6250	539.4
18	4.0000	.60000	67.000	.2600-02	.2700-02	.2900-02	.6061-04	.4996-04	.6785-04	.3500-01	.4000	538.7
18	4.0000	.65000	68.000	.1300-02	.1000-02	.1400-02	.2940-04	.2423-04	.3291-04	.1700-01	.2020	538.8
18	4.0000	.70000	69.000	.1100-02	.9000-03	.1300-02	.2606-04	.2148-04	.2917-04	.1500-01	.1700	538.7
18	4.0000	.75000	70.000	.0000-03	.2000-03	.3000-03	.5944-05	.4900-05	.6652-05	.3000-02	.3900-01	537.6
18	4.0000	.80000	75.000	.8000-03	.7000-03	.9000-03	.1897-04	.1564-04	.2123-04	.1100-01	.1340	538.2
18	4.0000	.85000	76.000	.1400-02	.1100-02	.1500-02	.3184-04	.2626-04	.3562-04	.1900-01	.2230	536.5
18	4.0000	.87500	77.000	.5000-03	.4000-03	.5000-03	.1099-04	.9053-05	.1229-04	.6000-02	.8500-01	537.5
18	4.0000	.90000	78.000	.3000-03	.3000-03	.4000-03	.7542-05	.6217-05	.8441-05	.4000-02	.5700-01	537.9
18	4.0000	.92500	79.000	.7000-03	.6000-03	.8000-03	.1621-04	.1337-04	.1815-04	.1000-01	.1180	537.7
18	4.0000	.95000	80.000	.1700-02	.1400-02	.1900-02	.3984-04	.3281-04	.4462-04	.2300-01	.2710	538.4

OH-74 (AEDC V41B-88A) B62C12F10M16W127E52V8R19

(RV8001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
19	7.940	34.80	189.0	125.1	180.0	.0000	91.90	.2000-01	.8970	3730.	.1855-04	.7401-07

RUN NUMBER	RN/L X10.6 /FT	STN NO R=
19	.9352	.4186-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/H REF R=0.9	W/H REF R=1.0	W/H REF R-TAH	H/H TO BTU/ R FT2SEC	H/H TO BTU/ R FT2SEC	H/H TO BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
19	1.0000	.27500	1.000	.1570-01	.1290-01	.1760-01	.3625-03	.2987-03	.4058-03	.2120	2.206	539.8
19	1.0000	.30000	2.000	.1360-01	.1120-01	.1520-01	.3139-03	.2587-03	.3514-03	.1840	1.955	539.9
19	1.0000	.32500	3.000	.1230-01	.1010-01	.1370-01	.2832-03	.2334-03	.3170-03	.1660	1.702	539.9
19	1.0000	.35000	4.000	.1240-01	.1020-01	.1390-01	.2862-03	.2358-03	.3203-03	.1680	1.743	539.9
19	1.0000	.37500	5.000	.1760-01	.1450-01	.1970-01	.4061-03	.3346-03	.4547-03	.2380	2.504	540.4
19	1.0000	.40000	6.000	.2310-01	.1900-01	.2590-01	.5337-03	.4397-03	.5975-03	.3120	3.213	540.6
19	1.0000	.42500	7.000	.1780-01	.1470-01	.2000-01	.4118-03	.3393-03	.4611-03	.2410	2.502	540.7
19	1.0000	.45000	8.000	.2540-01	.2090-01	.2840-01	.5861-03	.4828-03	.6563-03	.3430	3.509	541.0
19	1.0000	.47500	9.000	.2810-01	.2320-01	.3150-01	.6501-03	.5354-03	.7281-03	.3800	3.866	542.0
19	1.0000	.50000	10.000	.1790-01	.1470-01	.2000-01	.4126-03	.3399-03	.4613-03	.2420	2.450	540.5
19	1.0000	.52500	11.000	.2280-01	.1860-01	.2560-01	.5274-03	.4345-03	.5906-03	.3080	3.129	541.1
19	1.0000	.55000	12.000	.1900-01	.1570-01	.2130-01	.4399-03	.3624-03	.4925-03	.2570	2.508	540.5
19	1.0000	.57500	13.000	.1320-01	.1080-01	.1470-01	.3040-03	.2505-03	.3404-03	.1780	1.805	540.3
19	1.0000	.60000	14.000	.1270-01	.1040-01	.1420-01	.2927-03	.2412-03	.3276-03	.1720	1.741	539.8
19	1.0000	.62500	15.000	.6900-02	.5700-02	.7700-02	.1594-03	.1314-03	.1784-03	.9400-01	.9170	538.8
19	1.0000	.65000	16.000	.2400-02	.2000-02	.2700-02	.5554-04	.4587-04	.6227-04	.3300-01	.3320	538.6
19	1.0000	.67500	17.000	.4000-03	.3000-03	.4000-03	.8844-05	.7293-05	.9896-05	.5000-02	.5100-01	537.6
19	1.0000	.70000	18.000	.1580-01	.1300-01	.1770-01	.3548-03	.3007-03	.4074-03	.2140	2.516	539.2
19	2.0000	.72500	19.000	.1520-01	.1290-01	.1750-01	.3607-03	.2974-03	.4038-03	.2120	2.502	539.0
19	2.0000	.75000	20.000	.2540-01	.2420-01	.3290-01	.6796-03	.5599-03	.7609-03	.3980	4.697	540.5
19	2.0000	.77500	21.000	.2460-01	.2020-01	.2750-01	.5679-03	.4679-03	.6359-03	.3320	7.903	540.7
19	2.0000	.80000	22.000	.1830-01	.1500-01	.2040-01	.4219-03	.3477-03	.4723-03	.2470	2.760	539.8

DATE 07 OCT 75

04-74 (AEDC V419-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 29

(RV8001)

04-74 (AEDC V419-B8A) 862C12F10M16W127E52V8R19

RUN NUMBER	TRAJ	X/L	T/C NO	H/HREF R=0.5	H/HREF R=1.0	H/HREF R=TAN	H(9°) BTU/ R FT2SEC	H(10°) BTU/ R FT2SEC	HITAN) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
19	2.0000	.53000	23.000	.1310-01	.1090-01	.1480-01	.3084-03	.2525-03	.3430-03	.1800	2.004	539.9
19	2.0000	.56700	24.000	.1110-01	.9100-02	.1230-01	.2548-03	.2100-03	.2852-03	.1500	1.629	539.1
19	2.0000	.62000	25.000	.9000-02	.6600-02	.8900-01	.1846-03	.1522-03	.2066-03	.1080	1.182	538.5
19	2.0000	.67000	26.000	.8600-02	.5400-02	.7400-02	.1520-03	.1254-03	.1701-03	.8900-01	.9760	537.3
19	2.0000	.70500	27.000	.4900-02	.4000-02	.5500-02	.1134-03	.9352-04	.1268-03	.6700-01	.7210	536.8
19	2.0000	.75000	28.000	.1200-02	.9000-03	.1300-02	.2659-04	.2194-04	.2974-04	.1600-01	.1730	535.9
19	2.0000	.80000	29.000	.1000-03	.8000-03	.1100-02	.2216-04	.1828-04	.2479-04	.1300-01	.1450	536.4
19	2.0000	.82400	30.000	.1000-03	.1000-03	.1000-03	.1439-05	.1186-05	.1610-05	.1000-02	.1200-01	537.2
19	3.0000	.82400	31.000	.3190-01	.2620-01	.3570-01	.7366-03	.6062-03	.8254-03	.4280	4.545	544.3
19	3.0000	.82500	32.000	.2740-01	.2250-01	.3070-01	.6333-03	.5215-03	.7033-03	.3700	4.141	542.3
19	3.0000	.85000	33.000	.2050-01	.1690-01	.2300-01	.4737-03	.3903-03	.5304-03	.2770	3.111	540.4
19	3.0000	.87500	34.000	.1660-01	.1370-01	.1850-01	.3843-03	.3168-03	.4302-03	.2260	2.709	538.9
19	3.0000	.90000	35.000	.1400-01	.1150-01	.1560-01	.3225-03	.2660-03	.3610-03	.1900	2.354	538.0
19	3.0000	.92500	36.000	.2110-01	.1740-01	.2360-01	.4872-02	.4017-03	.5453-03	.2860	3.364	538.7
19	3.0000	.95000	37.000	.3170-01	.2610-01	.3550-01	.7325-03	.6036-03	.8200-03	.4290	4.991	539.5
19	3.0000	.97500	38.000	.2860-01	.2350-01	.3200-01	.6599-03	.5438-03	.7387-03	.3870	4.545	539.8
19	3.0000	.40000	39.000	.1710-01	.1410-01	.1910-01	.3941-03	.3248-03	.4411-03	.2310	2.733	539.1
19	3.0000	.42500	40.000	.1200-01	.1650-01	.2240-01	.4616-03	.3804-03	.5168-03	.2710	3.214	539.7
19	3.0000	.45000	41.000	.1540-01	.1270-01	.1720-01	.3554-03	.2929-03	.3977-03	.2090	2.390	538.8
19	3.0000	.47500	42.000	.1290-01	.1060-01	.1440-01	.2975-03	.2452-03	.3330-03	.1750	1.949	539.1
19	3.0000	.50000	43.000	.1030-01	.8500-02	.1150-01	.2391-03	.1963-03	.2615-03	.1400	1.562	536.8
19	3.0000	.52500	44.000	.7500-02	.6200-02	.8400-02	.1735-03	.1430-03	.1941-03	.1020	1.199	538.0
19	3.0000	.55000	45.000	.0500-02	.5700-02	.7700-02	.1584-03	.1306-03	.1772-03	.9300-01	1.041	537.8
19	3.0000	.57500	46.000	.4800-02	.4000-02	.5400-02	.1119-03	.9230-04	.1252-03	.6600-01	.7180	537.5
19	3.0000	.60000	47.000	.3700-02	.3000-02	.4100-02	.8478-04	.6993-04	.9485-04	.5000-01	.5320	536.8
19	3.0000	.62500	48.000	.1800-02	.1500-02	.2000-02	.4083-04	.3369-04	.4568-04	.2400-01	.2670	536.2
19	3.0000	.65000	49.000	.7000-03	.6000-03	.8000-03	.1625-04	.1341-04	.1818-04	.1000-01	.1050	535.8
19	3.0000	.67500	50.000	.5000-03	.4000-03	.6000-03	.1181-04	.9741-05	.1321-04	.7000-02	.7500-01	535.9
19	3.0000	.70000	51.000	.2100-02	.1800-02	.2400-02	.4923-04	.4060-04	.5508-04	.2900-01	.3600	536.9
19	3.0000	.72500	52.000	.7000-03	.6000-03	.8000-03	.1580-04	.1303-04	.1769-04	.9000-02	.1150	537.0
19	3.0000	.75000	53.000	.8000-03	.7000-03	.9000-03	.1912-04	.1570-04	.2140-04	.1100-01	.1570	538.2
19	3.0000	.77500	54.000	.1300-02	.1000-02	.1400-02	.2924-04	.2411-04	.3272-04	.1700-01	.2260	538.2
19	3.0000	.80000	55.000	.1800-02	.1500-02	.2000-02	.4212-04	.3473-04	.4714-04	.2500-01	.2510	538.3
19	4.0000	.82500	56.000	.3390-01	.2790-01	.3800-01	.7829-03	.6438-03	.8777-03	.4530	5.173	546.8
19	4.0000	.85000	57.000	.2570-01	.2120-01	.2880-01	.5946-03	.4894-03	.6562-03	.3460	4.059	543.8
19	4.0000	.87500	58.000	.2210-01	.1820-01	.2480-01	.5115-03	.4212-03	.5730-03	.4980	3.501	542.6
19	4.0000	.90000	59.000	.2170-01	.1790-01	.2430-01	.5016-03	.4130-03	.5618-03	.2930	3.626	542.3
19	4.0000	.92500	60.000	.2680-01	.2140-01	.2910-01	.6005-03	.4947-03	.6734-03	.3510	4.612	540.9
19	4.0000	.95000	61.000	.1620-01	.1500-01	.3010-01	.6.03-03	.5109-03	.5945-03	.3630	4.760	541.2
19	4.0000	.97500	62.000	.1620-01	.1500-01	.3010-01	.6.03-03	.5109-03	.5945-03	.3630	4.760	541.2
19	4.0000	.40000	63.000	.1460-01	.1220-01	.1660-01	.3424-03	.2822-03	.3832-03	.2010	2.637	539.5
19	4.0000	.42500	64.000	.1100-01	.9100-02	.1230-01	.2543-03	.2096-03	.2846-03	.1490	1.959	539.5
19	4.0000	.45000	65.000	.8000-02	.6600-02	.8900-02	.1845-03	.1521-03	.2065-03	.1080	1.423	539.0

REPRODUCED BY OF THE
ORIGINATOR'S POOL

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 30

(RV8001)

OH-74 (AEDC V418-B8A) 882C12F10H18W127E82V8R1B

RUN NUMBER	TRA °C	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TW DEG. R
18	4.0000	.45000	62.000	.6000-02	.4900-02	.6700-02	.1378-03	.1136-03	.1542-03	.8100-01	1.050	539.0
19	4.0000	.47500	53.000	.4800-02	.4000-02	.5400-02	.1108-03	.9131-04	.1240-03	.6500-01	.8300	.6
19	4.0000	.50000	64.000	.4000-02	.3300-02	.4500-02	.9295-04	.7663-04	.1040-03	.5500-01	.6780	539.4
19	4.0000	.52500	55.000	.3700-02	.3100-02	.4200-02	.8611-04	.7099-04	.9637-04	.5100-01	.6280	538.4
19	4.0000	.55000	56.000	.3100-02	.2500-02	.3400-02	.7077-04	.5835-04	.7919-04	.4200-01	.4890	538.2
19	4.0000	.50000	67.000	.1900-02	.1500-02	.2100-02	.4285-04	.3531-04	.4795-04	.2500-01	.2850	537.5
19	4.0000	.55000	68.000	.1000-02	.8000-03	.1100-02	.2263-04	.1866-04	.2532-04	.1300-01	.1570	537.3
19	4.0000	.75000	70.000	.6000-03	.5000-03	.6000-03	.1281-04	.1057-04	.1433-04	.8000-02	.8400-01	536.4
19	4.0000	.80000	75.000	.5000-03	.4000-03	.6000-03	.1226-04	.1011-04	.1371-04	.7000-02	.6700-01	537.4
19	4.0000	.60000	76.000	.4000-03	.3000-03	.4000-03	.8975-05	.7401-05	.1004-04	.5000-02	.6300-01	537.6
19	4.0000	.87500	77.000	.4000-03	.4000-03	.5000-03	.1021-04	.8420-05	.1142-04	.6000-02	.7900-01	537.0
19	4.0000	.90000	78.000	.7000-03	.6000-03	.8000-03	.1668-04	.1375-04	.1855-04	.1000-01	.1280	537.5
19	4.0000	.92500	79.000	.1500-02	.1300-02	.1700-02	.3580-04	.2952-04	.4005-04	.2100-01	.2610	537.9
19	4.0000	.95000	80.000	.1700-02	.1400-02	.1900-02	.3984-04	.3281-04	.4462-04	.2300-01	.2710	538.4

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 31

ORBITER FUSELAGE

OH-74 (AEDC V41B-88A) B82C12F10M16M127E52V8R19

(R/8001)

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST COND.T.JNS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
20	7.940	39.86	189.1	1253.	180.0	.0000	92.10	.2000-01	.8980	3733.	.1853-04	.7413-07

RUN NUMBER	RN/L	WREF 8 U/ R FT2SEC	STN NO R=
20	.9334	.2312-01	.4189-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/WREF R=0.9	H/WREF R=1.0	H/WREF R=TAW	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAH1 BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. P
20	1.0000	.27500	1.0000	.1580-01	.1300-01	.1770-01	.3654-03	.3013-03	.4090-03	.2150	2.234	539.2
20	1.0000	.30000	2.0000	.1370-01	.1130-01	.1530-01	.3164-03	.2609-03	.3540-03	.1870	1.985	538.1
20	1.0000	.32500	3.0000	.1170-01	.0960-02	.1310-01	.2701-03	.2227-03	.3022-03	.1590	1.636	539.1
20	1.0000	.35000	4.0000	.1750-01	.1450-01	.1960-01	.4054-03	.3343-03	.4537-03	.2390	2.479	539.0
20	1.0000	.37500	5.0000	.1960-01	.1610-01	.2190-01	.4523-03	.3728-03	.5063-03	.2660	2.799	540.1
20	1.0000	.40000	6.0000	.2010-01	.1550-01	.2240-01	.4636-03	.3622-03	.5189-03	.2730	2.805	539.6
20	1.0000	.42500	7.0000	.1950-01	.1600-01	.2180-01	.4501-03	.3717-03	.5039-03	.2650	2.747	540.0
20	1.0000	.45000	8.0000	.2780-01	.2290-01	.3110-01	.6421-03	.5292-03	.7188-03	.3770	3.860	540.6
20	1.0000	.47500	9.0000	.1870-01	.1540-01	.2090-01	.4319-03	.3539-03	.4833-03	.2540	2.587	539.9
20	1.0000	.50000	10.0000	.2310-01	.1900-01	.2590-01	.5342-03	.4403-03	.5980-03	.2140	3.185	540.1
20	1.0000	.52500	11.0000	.2240-01	.1840-01	.2500-01	.5173-03	.4264-03	.5791-03	.3040	3.084	540.2
20	1.0000	.55000	12.0000	.1770-01	.1460-01	.1980-01	.4096-03	.3377-03	.4585-03	.2410	2.424	539.4
20	1.0000	.60000	13.0000	.1460-01	.1210-01	.1640-01	.3382-03	.2788-03	.3785-03	.1990	2.020	539.2
20	1.0000	.65000	14.0000	.8300-02	.6900-02	.9303-02	.1921-03	.1584-03	.2149-03	.1130	1.149	538.5
20	1.0000	.70000	15.0000	.1700-02	.1400-02	.1900-02	.3918-04	.3232-04	.4383-04	.2300-01	.2270	537.4
20	1.0000	.75000	16.0000	.2300-02	.1900-02	.2600-02	.5365-04	.4426-04	.6001-04	.3200-01	.3220	536.8
20	1.0000	.80000	17.0000	.1700-02	.1400-02	.1900-02	.3981-04	.3284-04	.4453-04	.2300-01	.2280	537.4
20	2.0000	.85000	18.0000	.1450-01	.1190-01	.1620-01	.3344-03	.2757-03	.3742-03	.1970	2.316	538.7
20	2.0000	.33700	19.0000	.2100-01	.1730-01	.2350-01	.4850-03	.3999-03	.5428-03	.2860	3.376	538.8
20	2.0000	.39000	20.0000	.2150-01	.1770-01	.2400-01	.4963-03	.4092-03	.5554-03	.2920	3.454	538.9
20	2.0000	.42600	21.0000	.3070-01	.2530-01	.3440-01	.7101-03	.5953-03	.7948-03	.4170	4.904	540.0
20	2.0000	.47800	22.0000	.1980-01	.1630-01	.2210-01	.4573-03	.3770-03	.5117-03	.2690	3.006	539.0

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 32

(RVB001)

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H(19T) BTU/ R FT2SEC	H(1T) BTU/ R FT2SEC	H(1TAM) BTU/ R FT2SEC	ODOT BTU/ R FT2SEC	DTMOT DEG. R /SEC	TW DEG. R
20	2.0000	.53000	23.000	.1310-01	.1080-01	.1460-01	.3024-03	.2493-03	.3384-03	.1780	1.988	538.9
20	2.0000	.56700	24.000	.1000-01	.8200-02	.1110-01	.2302-03	.1899-03	.2576-03	.1360	1.479	538.2
20	2.0000	.62000	25.000	.6700-02	.5500-02	.7500-02	.1554-03	.1282-03	.1735-03	.9200-01	.9990	538.0
20	2.0000	.67000	26.000	.3500-02	.2000-02	.2700-02	.5670-04	.4678-04	.6343-04	.3300-01	.3650	537.0
20	2.0000	.70500	27.000	.1000-02	.8000-03	.1100-02	.2206-04	.1820-04	.2467-04	.1300-01	.1410	536.1
20	2.0000	.75000	28.000	.2700-02	.2200-02	.3000-02	.6277-04	.5181-04	.7021-04	.3700-01	.4090	535.9
20	2.0000	.80000	29.000	.1900-02	.1600-02	.2100-02	.4422-04	.3649-04	.4946-04	.2600-01	.2900	536.2
20	2.0000	.82400	30.000	.9000-03	.7000-03	.1000-02	.1966-04	.1622-04	.2199-04	.1200-01	.1620	536.9
20	3.0000	.82400	31.000	.3150-01	.2600-01	.3530-01	.7288-03	.6000-03	.8164-03	.4260	4.515	543.8
20	3.0000	.82500	32.000	.2660-01	.2190-01	.2980-01	.6144-03	.5062-03	.6879-03	.3600	4.036	541.7
20	3.0000	.82500	33.000	.2070-01	.1700-01	.2310-01	.4778-03	.3939-03	.5348-03	.2810	3.151	539.9
20	3.0000	.82500	34.000	.1590-01	.1310-01	.1780-01	.3669-03	.3026-03	.4106-03	.2160	2.598	538.3
20	3.0000	.82500	35.000	.1620-01	.1340-01	.1810-01	.3745-03	.3089-03	.4190-03	.2210	2.743	537.7
20	3.0000	.82500	36.000	.2790-01	.2300-01	.3120-01	.6456-03	.5324-03	.7224-03	.3800	4.473	538.4
20	3.0000	.82500	37.000	.2740-01	.2260-01	.3070-01	.6336-03	.5225-03	.7089-03	.3730	4.344	538.5
20	3.0000	.82500	38.000	.2110-01	.1740-01	.2360-01	.4875-03	.4020-03	.5455-03	.2870	3.379	538.3
20	3.0000	.82500	39.000	.1940-01	.1600-01	.2170-01	.4475-03	.3691-03	.5007-03	.2640	3.120	539.0
20	3.0000	.82500	40.000	.1780-01	.1470-01	.1990-01	.4120-03	.3398-03	.4610-03	.2430	2.887	538.2
20	3.0000	.82500	41.000	.1410-01	.1160-01	.1570-01	.3249-03	.2680-03	.3635-03	.1920	2.198	537.5
20	3.0000	.82500	42.000	.1210-01	.1000-01	.1360-01	.2803-03	.2312-03	.3135-03	.1650	1.848	537.5
20	3.0000	.82500	43.000	.9000-02	.7400-02	.1010-01	.2077-03	.1713-03	.2324-03	.1230	1.370	537.6
20	3.0000	.82500	44.000	.6900-02	.5700-02	.7700-02	.1584-03	.1307-03	.1772-03	.9400-01	1.101	537.0
20	3.0000	.82500	45.000	.6200-02	.5100-02	.7000-02	.1437-03	.1185-03	.1608-03	.8500-01	.9480	537.3
20	3.0000	.82500	46.000	.4500-02	.3700-02	.5000-02	.1034-03	.8530-04	.1157-03	.6100-01	.6660	536.8
20	3.0000	.82500	47.000	.2700-02	.2200-02	.3000-02	.6222-04	.5135-04	.6959-04	.3700-01	.3920	535.9
20	3.0000	.82500	48.000	.1400-02	.1200-02	.1600-02	.3330-04	.2748-04	.3724-04	.2000-01	.2180	525.8
20	3.0000	.82500	49.000	.2500-02	.2100-02	.2800-02	.5784-04	.4757-04	.6446-04	.3400-01	.3721	535.6
20	3.0000	.82500	50.000	.2200-02	.1800-02	.2400-02	.5028-04	.4149-04	.5623-04	.3000-01	.3200	535.8
20	3.0000	.82500	51.000	.9000-03	.8000-03	.1100-02	.2185-04	.1803-04	.2445-04	.1300-01	.1600	537.6
20	3.0000	.82500	52.000	.1100-02	.1100-02	.1300-02	.2640-04	.2178-04	.2954-04	.1600-01	.1930	537.6
20	3.0000	.82500	53.000	.1300-02	.1600-02	.2100-02	.4365-04	.3599-04	.4884-04	.1800-01	.2530	538.2
20	3.0000	.82500	54.000	.1900-03	.1600-02	.2200-02	.4588-04	.3783-04	.5133-04	.2700-01	.2750	538.3
20	3.0000	.82500	55.000	.2000-02	.1600-02	.2200-02	.4588-04	.3783-04	.5133-04	.2700-01	.2750	538.3
20	4.0000	.82500	71.000	.3390-01	.2790-01	.3800-01	.7846-03	.6455-03	.8794-03	.4560	5.205	546.3
20	4.0000	.82500	72.000	.2570-01	.2120-01	.2880-01	.5950-03	.4899-03	.6664-03	.3400	4.078	543.3
20	4.0000	.82500	73.000	.2260-01	.1860-01	.2530-01	.5231-03	.4309-03	.5858-03	.3060	3.594	542.3
20	4.0000	.82500	74.000	.2340-01	.1930-01	.2620-01	.5417-03	.4462-03	.6065-03	.3170	3.932	541.9
20	4.0000	.82500	75.000	.2830-01	.2340-01	.3170-01	.6553-03	.5401-03	.7336-03	.3850	5.053	540.4
20	4.0000	.82500	56.000	.2180-01	.1800-01	.2440-01	.5046-03	.4159-03	.5648-03	.2970	3.895	539.9
20	4.0000	.82500	57.000	.1780-01	.1470-01	.1990-01	.4116-03	.3394-03	.4607-03	.2420	3.183	539.1
20	4.0000	.82500	58.000	.1450-01	.1190-01	.1620-01	.3343-03	.2757-03	.3741-03	.1970	2.589	538.4
20	4.0000	.82500	59.000	.9200-02	.7600-02	.1030-01	.1244-04	.1752-03	.2377-03	.1250	1.646	538.1
20	4.0000	.82500	60.000	.6700-02	.5500-02	.7500-02	.1545-03	.1274-03	.1728-03	.9100-01	1.198	537.6

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 33

OH-74 (AEDC V41B-B8A) B62C12F10M18W127E52V8R1S

(RV8001)

RUN NUMBER	TRAJ	X/L	T/C NO	H/ R	H/REF R 3.9	H/REF R=1.0	H/REF R=TAW	H(9TO) BTU/ R F12SEC	H(10) BTU/ R F12SEC	H(1AM) BTU/ R F12SEC	QDOT BTU/ F12SEC	DTMDT DEG. R /SEC	T4 DEG. R
20	4.0000	.45000	62.000	.5200-02	.4300-02	.5800-02	.5800-02	.1207-03	.3455-04	.1350-03	.7100-01	.9250	537.9
20	4.0000	.47500	63.000	.4400-02	.3600-02	.4900-02	.4900-02	.1020-03	.8417-04	.1142-03	.6000-01	.7690	537.6
20	4.0000	.49000	64.000	.3400-02	.2800-02	.3800-02	.3800-02	.7901-04	.6518-04	.8839-04	.4700-01	.5790	537.4
20	4.0000	.52500	65.000	.2800-02	.2300-02	.3100-02	.3100-02	.6375-04	.5258-04	.7132-04	.3800-01	.4670	537.7
20	4.0000	.55000	66.000	.3100-02	.2500-02	.3400-02	.3400-02	.7087-04	.5846-04	.7928-04	.4200-01	.4920	537.4
20	4.0000	.60000	67.000	.1400-02	.1200-02	.1600-02	.1600-02	.3292-04	.2716-04	.3683-04	.1900-01	.2200	536.9
20	4.0000	.65000	68.000	.2000-03	.2000-03	.2000-03	.2000-03	.4546-04	.3750-05	.5085-05	.3000-02	.3200-01	537.0
20	4.0000	.70000	69.000	.1400-02	.1200-02	.1600-02	.1600-02	.3305-04	.2727-04	.3698-04	.2000-01	.2180	537.3
20	4.0000	.75000	70.000	.2000-02	.1600-02	.2200-02	.2200-02	.4546-04	.3751-04	.5085-04	.2700-01	.3010	536.5
20	4.0000	.80000	75.000	.6000-03	.5000-03	.6000-03	.6000-03	.1342-04	.1107-04	.1501-04	.8000-02	.9600-01	537.3
20	4.0000	.87500	77.000	.1400-02	.1100-02	.1600-02	.1600-02	.3218-04	.2655-04	.3600-04	.1900-01	.2500	537.0
20	4.0000	.90000	78.000	.2400-02	.2000-02	.2700-02	.2700-02	.5523-04	.4556-04	.6180-04	.3300-01	.4240	537.6
20	4.0000	.92500	79.000	.2900-02	.2400-02	.3200-02	.3200-02	.6616-04	.5490-04	.7446-04	.3900-01	.4880	537.6
20	4.0000	.95000	80.000	.1700-02	.1400-02	.1900-02	.1900-02	.3554-04	.3281-04	.4462-04	.2300-01	.2710	538.4

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 34

OH-74 (AEDC V41B-88A) B86C12F10M18U127E52V8R19

(RV8001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
21	7.940	43.87	190.4	1254.	180.0	.0000	92.10	.2000-01	.9040	3735.	.1865-04	.7419-07

RUN NUMBER	RN/L	STN NO
21	9387	.4176-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H(190) BTU/ R FT2SEC	H(170) BTU/ R FT2SEC	H(140) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
21	1.0000	.27500	1.0000	.1340-01	.1100-01	.1490-01	.3099-03	.2955-03	.3469-03	.1020	1.895	539.8
21	1.0000	.30000	2.0000	.1340-01	.1100-01	.1500-01	.3105-03	.2961-03	.3476-03	.1830	1.946	539.5
21	1.0000	.32500	3.0000	.1330-01	.1100-01	.1490-01	.3086-03	.2945-03	.3453-03	.1920	1.872	539.2
21	1.0000	.35000	4.0000	.2120-01	.1750-01	.2380-01	.4928-03	.4053-03	.5515-03	.2900	3.016	539.4
21	1.0000	.37500	5.0000	.1980-01	.1630-01	.2210-01	.4588-03	.3782-03	.5135-03	.2700	2.842	540.2
21	1.0000	.40000	6.0000	.1890-01	.1560-01	.2120-01	.4391-03	.3620-03	.4914-03	.2590	2.662	539.4
21	1.0000	.42500	7.0000	.2450-01	.2020-01	.2740-01	.5680-03	.4399-03	.6358-03	.3340	3.487	540.6
21	1.0000	.45000	8.0000	.2300-01	.1900-01	.2570-01	.5336-03	.4399-03	.5972-03	.2900	2.956	540.0
21	1.0000	.47500	9.0000	.2130-01	.1750-01	.2380-01	.4931-03	.4065-03	.5518-03	.3140	3.216	.0.0
21	1.0000	.50000	10.000	.2350-01	.1940-01	.2630-01	.5460-03	.4501-03	.6111-03	.3210	3.261	540.0
21	1.0000	.52500	11.000	.2100-01	.1730-01	.2350-01	.4864-03	.4010-03	.5444-03	.2860	2.907	539.7
21	1.0000	.55000	12.000	.1670-01	.1380-01	.1870-01	.3872-03	.3193-03	.4333-03	.2280	2.296	539.2
21	1.0000	.60000	13.000	.1180-01	.9800-02	.1330-01	.2749-03	.2267-03	.3076-03	.1620	1.645	539.1
21	1.0000	.65000	14.000	.4300-02	.3600-02	.4803-02	.1000-03	.8249-04	.1119-03	.5900-01	.6000	538.2
21	1.0000	.70000	15.000	.1500-02	.1300-02	.1700-02	.3537-04	.2918-04	.3955-04	.2100-01	.2050	537.2
21	1.0000	.75000	16.000	.2900-02	.2400-02	.3200-02	.6652-04	.5486-04	.7443-04	.3900-01	.3990	538.6
21	1.0000	.80000	17.000	.2200-02	.1800-02	.2500-02	.5175-04	.4269-04	.5789-04	.3100-01	.2970	537.5
21	1.0000	.85000	18.000	.1600-01	.1320-01	.1790-01	.3705-03	.3055-03	.4116-03	.2180	2.568	539.0
21	2.0000	.28500	19.000	.2600-01	.2140-01	.2910-01	.6028-03	.4970-03	.6746-03	.3550	4.94	539.6
21	2.0000	.33700	20.000	.2310-01	.1910-01	.2590-01	.5366-03	.4424-03	.6005-03	.3160	3.734	539.6
21	2.0000	.42600	21.000	.2730-01	.2250-01	.3060-01	.6336-03	.5223-03	.7092-03	.3730	4.380	540.2
21	2.0000	.47800	22.000	.2010-01	.1660-01	.2250-01	.4671-03	.3851-03	.5227-03	.2750	3.074	539.2

DATE 07 OCT 75

OH-74 (AEDC W418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 35

(RVB001)

OH-74 (AEDC W418-B8A) 862C12F10M16W127E52V8R19

RUN NUMBER	TRA	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H(9TO) FT2SEC	H(10) BTU/R	H(11A) FT2SEC	QDOT BTU/ FT2SEC	DTMDT /SEC	TM DEG. R
21	2.0000	.53000	23.000	.1180-01	.9700-02	.1320-01	.2728-03	.2750-03	.307-03	.1610	1.797	538.9
21	2.0000	.56700	24.000	.8400-02	.6900-02	.9400-02	.1940-03	.1600-03	.2170-03	.1150	1.248	538.2
21	2.0000	.62000	25.000	.4800-02	.4000-02	.5400-02	.1115-03	.9202-04	.1248-03	.6600-01	.7190	537.8
21	2.0000	.70500	27.000	.1400-02	.1200-02	.1600-02	.3345-04	.2760-04	.3741-04	.2000-01	.2140	536.2
21	2.0000	.75000	28.000	.3400-02	.2800-02	.3800-02	.7947-04	.6558-04	.8888-04	.4700-01	.5180	536.4
21	2.0000	.80000	29.000	.2300-02	.1900-02	.2500-02	.5260-04	.4340-04	.5883-04	.3100-01	.3450	536.6
21	2.0000	.82400	30.000	.9000-03	.7000-03	.1000-02	.1852-04	.1852-04	.2240-04	.1200-01	.1880	537.0
21	3.0000	.20000	31.000	.3070-01	.2930-01	.3440-01	.7122-03	.5885-03	.7977-03	.4170	4.424	543.3
21	3.0000	.22500	32.000	.2800-01	.2150-01	.2820-01	.6041-03	.4977-03	.8784-03	.3540	3.971	542.0
21	3.0000	.25000	33.000	.2020-01	.1670-01	.2270-01	.4697-03	.3872-03	.5257-03	.2760	3.100	540.2
21	3.0000	.27000	34.000	.1700-01	.1400-01	.1900-01	.3940-03	.3249-03	.4408-03	.2320	2.791	538.8
21	3.0000	.30000	35.000	.1920-01	.1580-01	.2150-01	.4458-03	.3677-03	.4988-03	.2630	3.265	538.5
21	3.0000	.32500	36.000	.2880-01	.2370-01	.3220-01	.6676-03	.5505-03	.7471-03	.3940	4.627	539.1
21	3.0000	.35000	37.000	.2470-01	.2040-01	.2760-01	.5732-03	.4427-03	.6414-03	.3380	3.930	539.2
21	3.0000	.37500	38.000	.2310-01	.1900-01	.2580-01	.5359-03	.4419-03	.5997-03	.3160	3.714	539.1
21	3.0000	.40000	39.000	.1940-01	.1600-01	.2170-01	.4503-03	.3713-03	.5038-03	.2660	3.141	538.5
21	3.0000	.42500	40.000	.1600-01	.1320-01	.1790-01	.3712-03	.3062-03	.4154-03	.2190	2.604	538.4
21	3.0000	.45000	41.000	.1300-01	.1070-01	.1460-01	.3021-03	.2492-03	.3380-03	.1790	2.046	537.7
21	3.0000	.47500	42.000	.1110-01	.9200-02	.1240-01	.2579-03	.1555-03	.2109-03	.1110	1.245	537.7
21	3.0000	.50000	43.000	.8100-02	.6700-02	.9100-02	.1885-03	.1555-03	.2109-03	.1110	1.245	537.7
21	3.0000	.52500	44.000	.5900-02	.4800-02	.6600-02	.1362-03	.1123-03	.1523-03	.8000-01	.9470	537.5
21	3.0000	.55000	45.000	.5300-02	.4400-02	.5900-02	.1228-03	.1012-03	.1372-03	.7300-01	.8100	537.3
21	3.0000	.60000	46.000	.3500-02	.2900-02	.3900-02	.8024-04	.6621-04	.8975-04	.4700-01	.5180	536.7
21	3.0000	.65000	47.000	.6000-03	.5000-03	.6000-03	.1326-04	.1094-04	.1483-04	.8000-02	.8400-01	536.1
21	3.0000	.70000	48.000	.1900-02	.1600-02	.2100-02	.4445-04	.3689-04	.4972-04	.2600-01	.2920	536.1
21	3.0000	.75000	49.000	.2900-02	.2400-02	.3200-02	.6670-04	.5505-04	.7460-04	.4000-01	.4310	536.2
21	3.0000	.80000	50.000	.2100-02	.1800-02	.2400-02	.4977-04	.4107-04	.5566-04	.2900-01	.3170	536.4
21	3.0000	.85000	51.000	.7000-03	.6000-03	.8000-03	.1644-04	.1356-04	.1839-04	.1000-01	.1210	537.7
21	3.0000	.87500	52.000	.1600-02	.1300-02	.1800-02	.3589-04	.3043-04	.4127-04	.2200-01	.2700	538.0
21	3.0000	.90000	53.000	.1600-02	.1300-02	.1800-02	.3719-04	.3067-04	.4161-04	.2200-01	.3070	538.3
21	3.0000	.92500	54.000	.2000-02	.1600-02	.2200-02	.4544-04	.3748-04	.5085-04	.2700-01	.3520	538.6
21	3.0000	.95000	55.000	.1900-02	.1600-02	.2200-02	.4516-04	.3724-04	.5052-04	.2700-01	.2710	538.3
21	4.0000	.20000	71.000	.3150-01	.2590-01	.3530-01	.7303-03	.6016-03	.8190-03	.4260	4.866	545.4
21	4.0000	.22500	72.000	.2570-01	.2120-01	.2880-01	.5966-03	.4914-03	.6682-03	.3490	4.100	542.9
21	4.0000	.25000	73.000	.2470-01	.2040-01	.2770-01	.5734-03	.4724-03	.6420-03	.3360	3.948	541.9
21	4.0000	.27500	74.000	.2350-01	.1940-01	.2630-01	.5457-03	.4497-03	.6109-03	.3210	3.973	541.2
21	4.0000	.30000	75.000	.2830-01	.2330-01	.3170-01	.6572-03	.5371-03	.7357-03	.3860	5.073	540.6
21	4.0000	.32500	56.000	.2040-01	.1680-01	.2280-01	.4736-03	.3904-03	.5371-03	.2790	3.660	540.1
21	4.0000	.35000	58.000	.1770-01	.1460-01	.1980-01	.4103-03	.3383-03	.4591-03	.2420	3.177	539.2
21	4.0000	.37500	59.000	.1280-01	.1050-01	.1430-01	.2964-03	.2444-03	.3316-03	.1750	2.299	538.4
21	4.0000	.40000	60.000	.8200-02	.6700-02	.9100-02	.1892-03	.1560-03	.2116-03	.1120	1.469	538.0
21	4.0000	.42500	61.000	.6100-02	.5000-02	.6800-02	.1407-03	.1161-03	.1574-03	.8300-01	1.093	537.6
21	4.0000	.45000	62.000	.4600-02	.3800-02	.5100-02	.1062-03	.8763-04	.1188-03	.6300-01	.8160	537.7

DATE 07 OCT 75

OH-74 (AEDC W418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 36

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 36

RYBQ01

OH-74 (AEDC V418-88A) B62C12F10M18W127E32V8R19

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(19T) BTU/ R FT2SEC	H(1T0) BTU/ R FT2SEC	H(1TAM) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
21	4.0000	.47500	63.000	.2600-.02	.2100-.02	.2900-.02	.5929-.04	.4891-.04	.6632-.04	.3500-.01	.4480	537.6
21	4.0000	.50000	64.000	.3200-.02	.2700-.02	.3600-.02	.7457-.04	.6152-.04	.8341-.04	.4400-.01	.5480	537.3
21	4.0000	.52500	65.000	.2600-.02	.2200-.02	.3000-.02	.6127-.04	.5054-.04	.6953-.04	.3600-.01	.4500	537.4
21	4.0000	.55000	66.000	.2300-.02	.1900-.02	.2600-.02	.5390-.04	.4447-.04	.6029-.04	.3200-.01	.3750	537.1
21	4.0000	.60000	67.000	.7000-.03	.6000-.03	.8000-.03	.1729-.04	.1427-.04	.1934-.04	.1900-.01	.1160	538.7
21	4.0000	.65000	68.000	.4000-.03	.3000-.03	.4000-.03	.9141-.05	.7543-.05	.1022-.04	.5000-.02	.6400-.01	536.9
21	4.0000	.70000	69.000	.1200-.02	.1000-.02	.1300-.02	.2707-.04	.2233-.04	.3058-.04	.1600-.01	.1790	537.6
21	4.0000	.75000	70.000	.1400-.02	.1200-.02	.1600-.02	.3309-.04	.2730-.04	.3701-.04	.2000-.01	.2190	536.8
21	4.0000	.80000	71.000	.9000-.03	.7000-.03	.1000-.02	.2034-.04	.1678-.04	.2275-.04	.1200-.01	.1450	537.5
21	4.0000	.85000	76.000	.1900-.02	.1500-.02	.2100-.02	.4335-.04	.3577-.04	.4848-.04	.2500-.01	.3060	536.1
21	4.0000	.87500	77.000	.1700-.02	.1400-.02	.1900-.02	.4018-.04	.3315-.04	.4495-.04	.2400-.01	.3120	537.4
21	4.0000	.90000	78.000	.3400-.02	.2800-.02	.3800-.02	.7975-.04	.6577-.04	.8922-.04	.4700-.01	.6120	538.3
21	4.0000	.92500	79.000	.4600-.02	.3800-.02	.5200-.02	.1069-.03	.8815-.04	.1156-.03	.6300-.01	.7830	538.5
21	4.0000	.95000	80.000	.1700-.02	.1400-.02	.1900-.02	.3984-.04	.3281-.04	.4462-.04	.2300-.01	.2710	538.4

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 37

OH-74 (AEDC V41B-B8A) B62C12F10H16H127E52V8R19

(RVB001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAH DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHC SLUGS /FT3	MU LB-SEC /FT2
28	7.960	19.82	298.2	1266.	-179.8	.0000	92.60	.3200-01	1.400	3753.	.2859-04	.7455-07

RUN NUMBER	RN/L X10 6 /FT	HRF BTU/ R FT2SEC	SIN NO R= .0175 .3376-01
28	1.439	.2892-01	

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H1GTO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAW BTU/ R FT2SEC	QOCT BTU/ FT2SEC	DTWOT DEG. 1 /SEC	TH DEG. R
28	1.0000	.27500	1.0000	.1310-01	.1080-01	.1470-01	.3792-03	.3131-03	.4240-03	.2270	2.360	539.9
28	1.0000	.30000	2.0000	.1150-01	.9500-02	.1280-01	.3322-03	.2743-03	.3714-03	.1990	2.119	539.4
28	1.0000	.32500	3.0000	.9000-02	.7400-02	.1000-01	.2592-03	.2141-03	.2898-03	.1560	1.601	539.3
28	1.0000	.35000	4.0000	.9600-02	.7900-02	.1070-01	.2781-03	.2297-03	.3109-03	.1670	1.735	538.9
28	1.0000	.37500	5.0000	.9100-02	.7500-02	.1020-01	.2641-03	.2181-03	.2952-03	.1580	1.669	539.3
28	1.0000	.40000	6.0000	.1070-01	.8900-02	.1200-01	.3106-03	.2565-03	.3472-03	.1860	1.919	538.9
28	1.0000	.42500	7.0000	.9700-02	.8000-02	.1090-01	.2814-03	.3324-03	.3145-03	.1620	1.754	539.2
28	1.0000	.45000	8.0000	.1270-01	.1050-01	.1420-01	.3683-03	.3042-03	.4117-03	.2210	2.266	538.9
28	1.0000	.47500	9.0000	.1650-01	.1350-01	.1850-01	.4781-03	.3948-03	.5346-03	.2870	2.922	539.9
28	1.0000	.50000	10.0000	.1730-01	.1420-01	.1930-01	.4989-03	.4119-03	.5578-03	.2990	3.037	535.6
28	1.0000	.52500	11.0000	.1740-01	.1440-01	.1950-01	.5040-03	.4161-03	.5635-03	.3020	3.067	539.8
28	1.0000	.55000	12.0000	.1840-01	.1520-01	.2050-01	.5311-03	.4385-03	.5938-03	.3180	3.202	539.9
28	1.0000	.60000	13.0000	.2350-01	.1940-01	.2630-01	.6802-03	.5614-03	.7607-03	.4070	4.128	541.0
28	1.0000	.65000	14.0000	.3840-01	.3170-01	.4303-01	.1112-02	.9171-03	.1244-02	.6630	6.723	542.6
28	1.0000	.70000	15.0000	.6070-01	.5000-01	.6790-01	.1755-02	.1447-02	.1965-02	1.042	10.17	545.9
28	1.0000	.75000	16.0000	.4630-01	.3820-01	.5180-01	.1338-02	.1103-02	.1497-02	.7970	8.069	543.9
28	1.0000	.80000	17.0000	.2050-01	.1690-01	.2290-01	.5918-03	.4883-03	.6619-03	.3540	3.428	541.9
28	1.0000	.85000	18.0000	.1300-01	.1080-01	.1460-01	.3765-03	.3110-03	.4278-03	.2260	2.660	538.6
28	1.0000	.33700	19.0000	.1080-01	.8900-02	.1210-01	.3121-03	.2579-03	.3488-03	.1880	2.220	537.8
28	1.0000	.39000	20.0000	.1190-01	.9903-02	.1330-01	.3449-03	.2850-03	.3855-03	.2080	2.455	537.6
28	1.0000	.42600	21.0000	.1680-01	.1390-01	.1880-01	.4868-03	.4021-03	.5442-03	.2920	3.438	538.8
28	1.0000	.47800	22.0000	.2340-01	.1930-01	.2620-01	.6775-03	.5595-03	.7574-03	.4060	4.538	539.4

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 38

OH-74 (AEDC V41B-B8A) B62C12F10H16H127E52V8R19

(RVB001)

(RVR001)

04-74 (AEDC V41B-88A) 862C12F10M16W127E52V8R19

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	I..REF R=TAN	H19TD) BTU/ R FT2SEC	H17C) BTU/ R FT2SEC	H1TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
28	2.0000	.53000	23.000	.3200-01	.2640-01	.3570-01	.9240-03	.7625-03	.1033-02	.5520	6.159	541.7
28	2.0000	.56700	24.000	.4670-01	.3950-01	.5230-01	.1351-02	.1115-02	.1511-02	.8050	8.765	542.8
28	2.0000	.62000	25.000	.6980-01	.5750-01	.7820-01	.2019-02	.1664-02	.2260-02	1.198	13.00	546.3
28	2.0000	.67000	26.000	.3680-01	.3040-01	.4120-01	.1065-02	.8788-03	.1192-02	.6350	6.908	545.1
28	2.0000	.70500	27.000	.2200-01	.1820-01	.2460-01	.6375-03	.5263-03	.7128-03	.3820	4.117	540.4
28	2.0000	.75000	28.000	.1440-01	.1190-01	.1610-01	.4153-03	.3431-03	.4642-03	.2500	2.746	538.6
28	2.0000	.80000	29.000	.1240-01	.1020-01	.1380-01	.3580-03	.2957-03	.4002-03	.2150	2.378	538.8
28	2.0000	.82400	30.000	.3700-02	.3000-02	.4100-02	.1065-03	.8794-04	.1191-03	.6400-01	.8910	539.8
28	2.0000	.82400	31.000	.2910-01	.2400-01	.3250-01	.8408-03	.6932-03	.9409-03	.5000	5.303	544.7
28	2.0000	.82500	32.000	.2240-01	.1850-01	.2510-01	.6487-03	.5352-03	.7256-03	.3870	4.341	542.2
28	2.0000	.82500	33.000	.1690-01	.1400-01	.1890-01	.4895-03	.4041-03	.5473-03	.2930	3.289	540.3
28	2.0000	.82500	34.000	.1370-01	.1130-01	.1530-01	.3469-03	.3278-03	.4436-03	.2380	2.863	538.8
28	2.0000	.82500	35.000	.1150-01	.0950-02	.1290-01	.3334-03	.2755-03	.3727-03	.2010	2.491	537.6
28	2.0000	.82500	36.000	.1240-01	.1020-01	.1380-01	.3572-03	.2951-03	.3998-03	.2150	2.529	537.5
28	2.0000	.82500	37.000	.1280-01	.1050-01	.1430-01	.3690-03	.3049-03	.4123-03	.2220	2.585	537.5
28	2.0000	.82500	38.000	.1360-01	.1120-01	.1520-01	.3925-03	.3243-03	.4386-03	.2360	2.779	537.5
28	2.0000	.82500	39.000	.2110-01	.1740-01	.2360-01	.6106-03	.5044-03	.6825-03	.3670	4.338	538.4
28	2.0000	.82500	40.000	.2800-01	.2310-01	.3130-01	.8095-03	.6683-03	.9052-03	.4850	5.759	540.2
28	2.0000	.82500	41.000	.3030-01	.2500-01	.3390-01	.8764-03	.7235-03	.9799-03	.5250	6.012	540.2
28	2.0000	.82500	42.000	.3600-01	.2970-01	.4070-01	.1041-02	.8592-03	.1164-02	.6220	6.942	541.6
28	2.0000	.82500	43.000	.5020-01	.4140-01	.5620-01	.1453-02	.1198-02	.1625-02	.8660	9.654	543.2
28	2.0000	.82500	44.000	.6790-01	.5600-01	.7600-01	.1364-02	.1619-02	.2199-02	1.166	13.66	545.9
28	2.0000	.82500	45.000	.6490-01	.5350-01	.7270-01	.1878-02	.1548-02	.2103-02	1.114	12.39	546.3
28	2.0000	.82500	46.000	.3020-01	.2490-01	.3370-01	.8728-03	.7205-03	.9759-03	.5230	5.689	540.6
28	2.0000	.82500	47.000	.1750-01	.1440-01	.1950-01	.5052-03	.4172-03	.5648-03	.3030	3.224	539.4
28	2.0000	.82500	48.000	.1180-01	.0800-02	.1320-01	.3410-03	.2824-03	.3821-03	.205	2.273	538.2
28	2.0000	.82500	49.000	.9300-02	.7700-02	.1040-01	.2697-03	.2228-03	.3015-03	.1620	1.768	538.1
28	2.0000	.82500	50.000	.8300-02	.6900-02	.9300-02	.2407-03	.1988-03	.2690-03	.1450	1.555	538.1
28	2.0000	.82500	51.000	.5500-02	.4600-02	.6200-02	.1596-03	.1318-03	.1785-03	.9677-01	1.186	540.3
28	2.0000	.82500	52.000	.1290-01	.1060-01	.1440-01	.3729-03	.3077-03	.4171-03	.2230	2.760	542.0
28	2.0000	.82500	53.000	.8900-02	.7300-02	.1000-01	.2573-03	.2123-03	.2878-03	.1540	2.144	541.7
28	2.0000	.82500	54.000	.1050-01	.0700-02	.1180-01	.3039-03	.2508-03	.3400-03	.1820	2.381	542.2
28	2.0000	.82500	55.000	.1260-01	.1040-01	.1410-01	.3642-03	.3005-03	.4074-03	.2180	2.205	542.0
28	2.0000	.82500	56.000	.3520-01	.2900-01	.3950-01	.1019-02	.8392-03	.1141-02	.6020	6.859	548.8
28	2.0000	.82500	57.000	.2760-01	.2270-01	.3090-01	.7980-03	.6578-03	.8932-03	.4740	5.554	545.5
28	2.0000	.82500	58.000	.2040-01	.1680-01	.2280-01	.5896-03	.4863-03	.6597-03	.3510	4.119	543.7
28	2.0000	.82500	59.000	.1630-01	.1340-01	.1820-01	.4713-03	.3888-03	.5272-03	.2810	3.482	542.9
28	2.0000	.82500	60.000	.1380-01	.1140-01	.1540-01	.3994-03	.3297-03	.4456-03	.2390	3.140	540.5
28	2.0000	.82500	61.000	.1620-01	.1340-01	.1810-01	.4687-03	.3870-03	.5241-03	.2810	3.687	540.2
28	2.0000	.82500	62.000	.2690-01	.2220-01	.3010-01	.7792-03	.6430-03	.8715-03	.4660	6.111	541.7
28	2.0000	.82500	63.000	.4310-01	.3550-01	.4820-01	.1245-02	.1027-02	.1393-02	.7420	9.730	543.4
28	2.0000	.82500	64.000	.5960-01	.4910-01	.6680-01	.1725-02	.1421-02	.1931-02	1.022	13.37	546.8
28	2.0000	.82500	65.000	.6120-01	.5040-01	.6850-01	.1770-02	.1458-02	.1982-02	1.047	13.70	547.7

CH-20 (AEC) V4 (R-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RV8001)

04-24 (AFSC W418-B8A) B62C12F10M16W127E52V8R1S

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H1ST0 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAH1 BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TM DEG. R
28	4.0000	.45000	62.000	.4500-01	.4040-01	.5490-01	.1410-02	.1169-02	.1587-02	.8430	10.91	545.2
28	4.0000	.47500	63.000	.3500-01	.2690-01	.3920-01	.1012-02	.8348-03	.1133-02	.6030	7.674	-
28	4.0000	.50000	64.000	.2140-01	.1770-01	.2400-01	.6194-03	.5112-03	.6927-03	.3710	4.594	541.1
28	4.0000	.52500	65.000	.1590-01	.1310-01	.1780-01	.4592-03	.3790-03	.5135-03	.2750	3.408	540.8
28	4.0000	.55000	66.000	.1290-01	.1070-01	.1440-01	.3736-03	.3084-03	.4177-03	.2240	2.630	540.1
28	4.0000	.60000	67.000	.9300-02	.7700-02	.1040-01	.2691-03	.2222-03	.3008-03	.1610	1.821	539.3
28	4.0000	.65000	68.000	.7700-02	.6400-02	.8700-02	.2240-03	.1850-03	.2504-03	.1340	1.579	539.4
28	4.0000	.70000	69.000	.6300-02	.5200-02	.7100-02	.1828-03	.1510-03	.2044-03	.1100	1.224	539.6
28	4.0000	.75000	70.000	.5800-02	.4800-02	.6500-02	.1672-03	.1381-03	.1869-03	.1010	1.123	538.3
28	4.0000	.80000	75.000	.2700-02	.2200-02	.2400-02	.7697-04	.6356-04	.8604-04	.4600-01	.5680	539.2
28	4.0000	.85000	76.000	.5000-03	.4000-03	.6000-03	.1573-04	.1299-04	.1789-04	.9000-02	.1120	539.1
28	4.0000	.87500	77.000	.3400-02	.2800-02	.3700-02	.9700-04	.8010-04	.1084-03	.5800-01	.7650	539.3
28	4.0000	.90000	79.000	.4400-02	.3700-02	.5000-02	.1283-03	.1059-03	.1434-03	.7700-01	.9990	539.6
28	4.0000	.92500	79.000	.3300-02	.2700-02	.3600-02	.9400-04	.7759-04	.1051-03	.5600-01	.6980	540.5
28	4.0000	.95000	80.000	.2700-02	.2200-02	.3000-02	.7706-04	.6362-04	.8617-04	.4600-01	.5420	540.2

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 40

OH-74 (AEDC V41B-B8A) 862C12F10M16W127E52V8R19

(RYB001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.0000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
22	2.350	24.84	299.4	1265	-179.8	.0000	92.60	.3200-01	1.405	3753.	.2871-04	.7455-07

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1(9T) BTU/ R F12SEC	H1(T0) BTU/ R F12SEC	H1(TAN) BTU/ R F12SEC	QDOT BTU/ F12SEC	DTADT DEG. R /SEC	TM DEG. R
29	1.0000	.27500	1.0000	.1340-01	.1110-01	.1500-01	.3885-03	.3207-03	.4344-03	.2330	2.416	540.4
29	1.0000	.30000	2.0000	.1150-01	.9500-02	.1280-01	.3331-03	.2750-03	.3724-03	.2000	2.122	540.0
29	1.0000	.32500	3.0000	.1040-01	.8500-02	.1160-01	.3000-03	.2477-03	.3354-03	.1800	1.862	539.6
29	1.0000	.35000	4.0000	.1080-01	.8900-02	.1200-01	.3116-03	.2573-03	.3483-03	.1870	1.941	538.5
29	1.0000	.37500	5.0000	.1040-01	.8600-02	.1180-01	.3015-03	.2488-03	.3371-03	.1810	1.902	540.2
29	1.0000	.40000	6.0000	.1170-01	.9700-02	.1310-01	.3387-03	.2797-03	.3787-03	.2030	2.062	538.4
29	1.0000	.42500	7.0000	.1440-01	.1190-01	.1610-01	.4172-03	.3444-03	.4665-03	.2500	2.593	540.5
29	1.0000	.45000	8.0000	.1920-01	.1590-01	.2150-01	.5572-03	.4599-03	.6231-03	.3340	3.414	540.9
29	1.0000	.47500	9.0000	.1800-01	.1480-01	.2010-01	.5207-03	.4297-03	.5823-03	.3120	3.174	541.1
29	1.0000	.50000	10.0000	.2050-01	.1690-01	.2290-01	.5940-03	.4902-03	.6543-03	.3550	3.603	541.2
29	1.0000	.52500	11.0000	.2780-01	.2290-01	.3110-01	.8055-03	.6546-03	.9009-03	.4810	4.877	542.0
29	1.0000	.55000	12.0000	.3310-01	.2730-01	.3700-01	.9584-03	.7907-03	.1072-02	.5720	5.744	542.7
29	1.0000	.57500	13.0000	.5610-01	.4630-01	.6290-01	.1627-02	.1340-02	.1822-02	.9640	9.745	540.0
29	1.0000	.60000	14.0000	.2780-01	.2290-01	.3110-01	.8044-03	.6636-03	.9000-03	.4800	4.860	543.1
29	1.0000	.62500	15.0000	.1380-01	.1140-01	.1540-01	.3996-03	.3297-03	.4469-03	.2390	2.338	541.5
29	1.0000	.65000	16.0000	.7200-02	.5900-02	.8000-02	.2090-03	.1717-03	.3266-03	.1250	1.263	540.9
29	1.0000	.67500	17.0000	.5300-02	.5200-02	.7000-02	.1826-03	.1507-03	.2042-03	.1090	1.061	540.8
29	1.0000	.70000	18.0000	.1290-01	.1050-01	.1440-01	.3732-03	.3081-03	.4173-03	.2240	2.627	540.2
29	2.0000	.28500	19.0000	.1260-01	.1040-01	.1410-01	.3646-03	.3010-03	.4077-03	.2190	2.582	540.6
29	2.0000	.33700	20.0000	.1790-01	.1480-01	.2010-01	.5197-03	.4290-03	.5811-03	.3110	3.674	540.0
29	2.0000	.39000	21.0000	.2520-01	.2080-01	.2820-01	.7311-03	.6032-03	.9178-03	.4370	5.126	542.0
29	2.0000	.42600	22.0000	.4160-01	.3430-01	.4650-01	.1205-02	.9938-03	.1348-02	.7180	8.002	543.4

PAGE 41

RYB0011

CH-74 (AEDC W-1R-BHA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

69-2752VBR19
THE-2752VBR19
15DC 1501341 041612752VBR19
041612752VBR19

DATE 07 OCT 79

NUMBER
RUN

TW
DEG

DTWOT
DEG P

(MAY 1964)

H(970)

4/4 3:23H

WHERE

"

3-1081

(RVB0011)

04-74 (AEDC V41B-88A) B62C12F10M16H127E32V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/REF R-0.9	H/REF R-1.0	H/REF R-TAM	H/9TO BTU/ R FT2SEC	H/10I BTU/ R FT2SEC	H/11A BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
29	2.0000	.53000	23.000	.5450-01	.4490-01	.6100-01	.1579-02	.1768-02	.9350	10.40	547.3	
29	2.0000	.56700	24.000	.2900-01	.2410-01	.3270-01	.8468-03	.6985-03	.9474-03	.5050	543.2	
29	2.0000	.62000	25.000	.1570-01	.1290-01	.1750-01	.4543-03	.3749-03	.5080-03	.2720	541.3	
29	2.0000	.67000	26.000	.1210-01	.1000-01	.1350-01	.3499-03	.2889-03	.3912-03	.2100	539.9	
29	2.0000	.70500	27.000	.9400-02	.7600-02	.1060-01	.2738-03	.2261-03	.3061-03	.1840	1.771	
29	2.0000	.75000	28.000	.6200-02	.5100-02	.6900-02	.1784-03	.1474-03	.1995-03	.1070	1.179	
29	2.0000	.80000	29.000	.4300-02	.3500-02	.4800-02	.1235-03	.1200-03	.1380-03	.7400-01	.8190	
29	2.0000	.82400	30.000	.1200-02	.1000-02	.1300-02	.3463-04	.2859-04	.3871-04	.2100-01	2900	
29	3.0000	.20000	31.000	.2890-01	.2380-01	.3230-01	.8360-03	.6891-03	.9358-03	.4960	5.263	
29	3.0000	.22500	32.000	.2360-01	.1950-01	.2640-01	.6841-03	.5641-03	.7654-03	.4070	4.560	
29	3.0000	.25000	33.000	.1860-01	.1540-01	.2080-01	.5401-03	.4456-03	.6041-03	.3230	3.615	
29	3.0000	.27500	34.000	.1430-01	.1160-01	.1600-01	.4151-03	.3427-03	.4642-03	.2490	2.963	
29	3.0000	.30000	35.000	.1310-01	.1090-01	.1470-01	.3809-03	.3145-03	.4258-03	.2280	2.834	
29	3.0000	.32500	36.000	.1350-01	.1100-01	.1510-01	.3910-03	.3228-03	.4371-03	.2340	2.756	
29	3.0000	.35000	37.000	.1530-01	.1260-01	.1710-01	.4426-03	.3655-03	.4949-03	.2650	3.086	
29	3.0000	.37500	38.000	.2440-01	.2020-01	.2730-01	.7081-03	.5844-03	.7919-03	.4240	4.975	
29	3.0000	.40000	39.000	.3160-01	.2610-01	.3540-01	.9184-03	.7561-03	.1025-02	.5470	6.456	
29	3.0000	.42500	40.000	.4680-01	.3960-01	.5240-01	.1356-02	.1118-02	.1517-02	.8060	9.546	
29	3.0000	.45000	41.000	.5580-01	.4600-01	.6250-01	.1617-02	.1333-02	.1810-02	.9600	10.96	
29	3.0000	.47500	42.000	.5080-01	.4190-01	.5690-01	.1473-02	.1214-02	.1649-02	.8740	9.723	
29	3.0000	.50000	43.000	.3230-01	.2660-01	.3610-01	.9358-03	.7719-03	.1047-02	.5580	6.214	
29	3.0000	.52500	44.000	.1820-01	.1500-01	.2040-01	.5284-03	.4361-03	.5909-03	.3160	3.711	
29	3.0000	.55000	45.000	.1400-01	.1150-01	.1560-01	.4053-05	.3346-03	.4532-03	.2430	2.709	
29	3.0000	.60000	46.000	.9600-02	.7900-02	.1080-01	.2789-03	.2303-03	.3118-03	.1670	1.822	
29	3.0000	.65000	47.000	.7500-02	.6100-02	.8200-02	.2128-03	.1757-03	.2379-03	.1280	1.358	
29	3.0000	.70000	48.000	.5300-02	.4400-02	.6000-02	.1548-03	.1279-03	.1730-03	.9300-01	1.028	
29	3.0000	.75000	49.000	.3400-02	.2800-02	.3700-02	.9715-04	.8025-04	.1086-03	.5800-01	.6360	
29	3.0000	.80000	50.000	.1300-02	.1100-02	.1500-02	.3787-04	.3128-04	.4233-04	.2300-01	.2450	
29	3.0000	.85000	51.000	.3600-02	.2900-02	.4000-02	.1032-03	.8925-04	.1154-03	.6200-01	.7690	
29	3.0000	.90000	52.000	.5800-02	.4800-02	.6500-02	.1688-03	.1393-03	.1888-03	.1010	1.252	
29	3.0000	.92500	53.000	.6200-02	.5100-02	.7000-02	.1808-03	.1492-03	.2023-03	.1086	1.507	
29	3.0000	.95000	54.000	.5300-02	.4400-02	.6000-02	.1546-03	.1275-03	.1729-03	.9200-01	1.213	
29	4.0000	.20000	55.000	.4100-02	.3400-02	.4600-02	.1196-03	.9874-04	.1338-03	.7200-01	7.010	
29	4.0000	.22500	56.000	.3590-01	.2960-01	.4020-01	.1041-02	.8575-03	.1166-02	.6150	5.425	
29	4.0000	.25000	57.000	.2690-01	.2220-01	.3010-01	.7794-03	.6425-03	.8724-03	.4630	5.454	
29	4.0000	.27500	58.000	.2100-01	.1800-01	.2450-01	.6333-03	.5223-03	.7086-03	.3770	4.426	
29	4.0000	.30000	59.000	.1870-01	.1540-01	.2090-01	.5409-03	.4462-03	.6051-03	.3230	3.996	
29	4.0000	.32500	60.000	.1600-01	.1320-01	.1790-01	.4643-03	.3832-03	.5132-03	.2780	3.644	
29	4.0000	.35000	61.000	.2760-01	.2270-01	.3080-01	.7985-03	.6586-03	.8933-03	.4760	6.242	
29	4.0000	.37500	62.000	.4690-01	.3870-01	.5310-01	.1360-02	.1120-02	.1522-02	.8000	10.55	
29	4.0000	.40000	63.000	.4750-01	.3910-01	.5310-01	.1376-02	.1134-02	.1540-02	.8160	10.68	
29	4.0000	.42500	64.000	.2910-01	.2400-01	.3260-01	.8439-03	.6960-03	.9441-03	.5030	6.592	
29	4.0000	.45000	65.000	.1790-01	.1480-01	.2000-01	.5181-03	.4275-03	.5794-03	.3100	4.065	

DATE 07 OCT 75

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 42

04-74 (AEDC V41B-88A) B62C12F10M16H127E32V8R19

(RVB0011)

RUN NUMBER	TRA'E	X/L	T/C NO	H/REF R-0.9	H/REF R-1.0	H/REF R-TAM	H/9TO BTU/ R FT2SEC	H/10I BTU/ R FT2SEC	H/11A BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
29	4.0000	.45000	62.000	.1200-01	.9900-02	.1350-01	.3488-03	.2880-03	.3901-03	.2090	2.710	540.6
29	4.0000	.47500	63.000	.9600-02	.7900-02	.1070-01	.2775-03	.2291-03	.3103-03	.1660	2.120	540.3
29	4.0000	.50000	64.000	.8300-02	.6900-02	.9300-02	.2411-03	.1990-03	.2695-03	.1450	1.792	539.9
29	4.0000	.52500	65.000	.7200-02	.5900-02	.8000-02	.2085-03	.1722-03	.2331-03	.1250	1.551	539.8
29	4.0000	.55000	66.000	.6500-02	.5400-02	.7300-02	.1885-03	.1557-03	.2107-03	.1130	1.329	539.4
29	4.0000	.60000	67.000	.4300-02	.3500-02	.4800-02	.1232-03	.1018-03	.1377-03	.7400-01	.8340	539.0
29	4.0000	.65000	68.000	.3600-02	.3000-02	.4000-02	.1035-03	.8550-04	.1157-03	.6200-01	.7310	538.9
29	4.0000	.70000	69.000	.2100-02	.1800-02	.2400-02	.6176-04	.5099-04	.6905-04	.3700-01	.4140	539.6
29	4.0000	.75000	70.000	.1200-02	.1000-02	.1400-02	.3536-04	.2921-04	.3952-04	.2100-01	.2370	538.3

29 4.0000 67.0000 4.500-02 1.500-02 1.232-03 1.018-03 1.137-03 0.00-01 .8340 539.0
29 4.0000 68.000 3600-02 3000-02 4000-02 1035-03 8550-04 1157-03 6200-01 7310 538.9
29 4.0000 69.000 2100-02 1800-02 2400-02 6176-04 5099-04 6905-04 3700-01 4140 539.6
29 4.0000 70.000 1200-02 1000-02 1400-02 3536-04 2921-04 3952-04 2100-01 2370 538.3
29 4.0000 75.000 9000-03 1000-02 1000-02 2486-04 2053-04 2779-04 1500-01 1800 539.1
29 4.0000 85000 4000-03 3000-03 4000-03 1064-04 8787-05 1190-04 6000-02 7600-01 539.6
29 4.0000 87500 8000-03 7000-03 9000-03 2321-04 1917-04 2595-04 1400-01 1830 539.0
29 4.0000 78.000 2460-02 2000-02 2700-02 7017-04 5794-04 7846-04 4200-01 5460 539.9
29 4.0000 92500 3700-02 3100-02 4200-02 1077-03 8892-04 1205-03 6400-01 7990 540.8
29 4.0000 95000 3000-02 2500-02 3300-02 8605-04 9622-04 5200-01 6060 540.3

PARAMETRIC DATA
BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000
TEST CONDITIONS*

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
30	7.960	29.71	299.8	1268.	-179.8	.0000	92.70	.3200-01	1.407	3756.	.2870-04	.7467-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R- .0175
30	1.444	.2901-01	.3370-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H1ST0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TN DEG. R
30	1.0000	.27500	1.0000	.1410-01	.1170-01	.1580-01	.4103-03	.3388-03	.4587-03	.2470	2.560	540.3
30	1.0000	.30000	2.0000	.1240-01	.1020-01	.1390-01	.3598-03	.2971-03	.4022-03	.2160	2.300	539.9
30	1.0000	.32500	3.0000	.1100-01	.9100-02	.1230-01	.3183-03	.2629-03	.3559-03	.1910	1.970	539.7
30	1.0000	.35000	4.0000	.1170-01	.9700-02	.1310-01	.3390-03	.2800-03	.3739-03	.2040	2.120	539.2
30	1.0000	.37500	5.0000	.1140-01	.9400-02	.1270-01	.3302-03	.2727-03	.3691-03	.1990	2.091	539.9
30	1.0000	.40000	6.0000	.1820-01	.1510-01	.2040-01	.5288-03	.4366-03	.5912-03	.3180	3.267	540.5
30	1.0000	.42500	7.0000	.1930-01	.1590-01	.2150-01	.5585-03	.4611-03	.6245-03	.3350	3.476	541.3
30	1.0000	.45000	8.0000	.2280-01	.1880-01	.2550-01	.6603-03	.5451-03	.7384-03	.3960	4.052	541.5
30	1.0000	.47500	9.0000	.2290-01	.1890-01	.2560-01	.6850-03	.5489-03	.7436-03	.3990	4.062	541.4
30	1.0000	.50000	10.000	.3450-01	.2850-01	.3860-01	.1000-02	.8255-03	.1119-02	.5990	6.066	542.8
30	1.0000	.52500	11.000	.3100-01	.2550-01	.3460-01	.8981-03	.7410-03	.1005-02	.5370	5.443	543.0
30	1.0000	.55000	12.000	.2880-01	.2390-01	.3220-01	.8348-03	.6889-03	.9337-03	.5000	5.020	542.5
30	1.0000	.60000	13.000	.1820-01	.1500-01	.2040-01	.5278-03	.4356-03	.5903-03	.3160	3.205	542.1
30	1.0000	.65000	14.000	.15.0-01	.1410-01	.1910-01	.4953-03	.4089-03	.5539-03	.2970	3.013	541.4
30	1.0000	.70000	15.000	.1200.01	.9900-02	.1340-01	.3473-03	.2868-03	.3883-03	.2080	2.040	541.0
30	1.0000	.75000	16.000	.7100-02	.5930-02	.8000-02	.2070-03	.1709-03	.2314-03	.1240	1.263	539.6
30	1.0000	.80000	17.000	.1100-02	.9000-03	.1200-02	.3223-04	.2662-04	.3603-04	.1900-01	.1880	539.4
30	2.0000	.28500	18.000	.1450-01	.1200-01	.1620-01	.4210-03	.3476-03	.4716-03	.2530	2.972	540.2
30	2.0000	.33700	19.000	.1300-01	.1070-01	.1450-01	.3764-03	.3108-03	.4207-03	.2260	2.673	539.9
30	2.0000	.39000	20.000	.2690-01	.2220-01	.3010-01	.7801-03	.6439-03	.8723-03	.4680	5.521	541.5
30	2.0000	.42600	21.000	.3210-01	.2540-01	.3590-01	.9298-03	.7671-03	.1040-02	.5560	6.523	543.2
30	2.0000	.47800	22.000	.3640-01	.3010-01	.4080-01	.1057-02	.8721-03	.1183-02	.6320	7.039	543.6

DATE 07 OCT 75

OH-7A AEDC V41B-88A1 HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 44

OH-7A AEDC V41B-88A1 862C12F10H16M127F52V8R19

(RV8001)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	L/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R F12SEC	H1T0 BTU/ R F12SEC	H1TAN BTU/ R F12SEC	QOOT BTU/ F12SEC	DTMOI DEG. R /SEC	TH DEG. R
30	2.0000	.53000	23.000	.1850-01	.1340-01	.2090-01	.9409-03	.4464-03	.6049-03	.3240	.3614	542.1
30	2.0000	.56700	24.000	.1390-01	.1150-01	.1550-01	.4025-03	.3324-03	.4500-03	.2420	2.631	540.7
30	2.0000	.62000	25.000	.1000-01	.8200-02	.1110-01	.2891-03	.2387-03	.3232-03	.1740	1.891	540.4
30	2.0000	.67000	26.000	.8500-02	.7000-02	.9500-02	.2475-03	.2044-03	.2766-03	.1490	1.624	539.0
30	2.0000	.70500	27.000	.7400-02	.6100-02	.8200-02	.2133-03	.1762-03	.2394-03	.1290	1.387	538.7
30	2.0000	.75000	28.000	.2900-02	.2400-02	.3200-02	.8421-04	.6958-04	.9411-04	.5100-01	.5590	538.1
30	2.0000	.80000	29.000	.1200-02	.1000-02	.1300-02	.3447-04	.2848-04	.3853-04	.2300	.2300	538.3
30	2.0000	.82400	30.000	.3000-03	.2000-03	.3000-03	.7631-05	.6304-05	.8529-05	.5000-02	.6400-01	538.9
30	3.0000	.20000	31.000	.2950-01	.2440-01	.3310-01	.8580-03	.7074-03	.9601-03	.5110	5.420	545.3
30	3.0000	.22500	32.000	.2480-01	.2040-01	.2770-01	.7189-03	.5930-03	.8042-03	.4290	4.809	543.8
30	3.0000	.25000	33.000	.2000-01	.1650-01	.2240-01	.5812-03	.4797-03	.6500-03	.3480	3.904	541.9
30	3.0000	.27500	34.000	.1550-01	.1280-01	.1730-01	.4489-03	.3707-03	.5019-03	.2700	3.237	540.3
30	3.0000	.30000	35.000	.1390-01	.1150-01	.1550-01	.4023-03	.3323-03	.4497-03	.2420	3.003	539.5
30	3.0000	.32500	36.000	.1510-01	.1240-01	.1680-01	.4370-03	.3610-03	.4895-03	.2630	3.091	539.4
30	3.0000	.35000	37.000	.2430-01	.2010-01	.2720-01	.7049-03	.5820-03	.7880-03	.4230	4.921	540.5
30	3.0000	.37500	38.000	.3740-01	.3090-01	.4190-01	.1086-02	.8958-03	.1214-02	.6500	7.625	542.6
30	3.0000	.40000	39.000	.3030-01	.2500-01	.3390-01	.8783-03	.7249-03	.9822-03	.5260	6.210	542.0
30	3.0000	.42500	40.000	.2760-01	.2280-01	.3090-01	.8013-03	.6613-03	.8962-03	.4800	5.691	542.3
30	3.0000	.45000	41.000	.2340-01	.1930-01	.2620-01	.6792-03	.5607-03	.7554-03	.4080	4.665	541.0
30	3.0000	.47500	42.000	.1710-01	.1420-01	.1920-01	.4973-03	.4106-03	.5561-03	.2990	3.331	540.9
30	3.0000	.50000	43.000	.1310-01	.1080-01	.1460-01	.3788-03	.3128-03	.4235-03	.2280	2.540	540.4
30	3.0000	.52500	44.000	.1020-01	.8400-02	.1140-01	.2957-03	.2443-03	.3305-03	.1780	2.092	539.3
30	3.0000	.55000	45.000	.8700-02	.7200-02	.9800-02	.2535-03	.2094-03	.2833-03	.1530	1.703	539.8
30	3.0000	.60000	46.000	.6100-02	.5000-02	.6800-02	.1768-03	.1459-03	.1974-03	.1060	1.159	538.7
30	3.0000	.65000	47.000	.4400-02	.3700-02	.5000-02	.1290-03	.1066-03	.1442-03	.7800-01	.8270	538.5
30	3.0000	.70000	48.000	.2730-02	.2200-02	.3000-02	.7698-04	.6361-04	.8602-04	.4600-01	.5140	537.8
30	3.0000	.75000	49.000	.8000-03	.6000-03	.9000-03	.2221-04	.1836-04	.2482-04	.1300-01	.1460	537.5
30	3.0000	.80000	50.000	.6000-03	.5000-03	.7000-03	.1787-04	.1477-04	.1997-04	.1100-01	.1160	537.7
30	3.0000	.85000	51.000	.2400-02	.2000-02	.2700-02	.7063-04	.5835-04	.7694-04	.4300-01	.5280	538.9
30	3.0000	.87500	52.000	.1000-02	.8000-03	.1100-02	.2793-04	.2306-04	.3122-04	.1700-01	.2080	539.9
30	3.0000	.90000	53.000	.1200-02	.1000-02	.1400-02	.3611-04	.2982-04	.4037-04	.2200-01	.3030	540.3
30	3.0000	.92500	54.000	.1400-02	.1100-02	.1500-02	.3934-04	.3248-04	.4398-04	.2400-01	.3100	540.2
30	3.0000	.95000	55.000	.1200-02	.1000-02	.1300-02	.3407-04	.2814-04	.3805-04	.2000-01	.2080	539.7
30	4.0000	.20000	71.000	.3580-01	.2950-01	.4010-01	.1039-02	.8552-03	.1162-02	.6160	7.020	548.1
30	4.0000	.22500	72.000	.2651-01	.2190-01	.2970-01	.7700-03	.6350-03	.9615-03	.4590	5.385	544.4
30	4.0000	.25000	73.000	.2140-01	.1770-01	.2390-01	.6206-03	.5121-03	.6942-03	.3710	4.358	542.8
30	4.0000	.27500	74.000	.2010-01	.1650-01	.2250-01	.5830-03	.4812-03	.6520-03	.3490	4.328	542.0
30	4.0000	.30000	75.000	.2030-01	.1680-01	.2270-01	.5890-03	.4862-03	.6536-03	.3530	4.638	541.2
30	4.0000	.32500	57.000	.3500-01	.2890-01	.3910-01	.1015-02	.8370-03	.1135-02	.6060	7.936	544.3
30	4.0000	.35000	58.000	.3260-01	.2690-01	.3650-01	.9458-03	.7801-03	.1058-02	.5550	7.398	544.3
30	4.0000	.37500	59.000	.1980-01	.1640-01	.2210-01	.4743-03	.4423-03	.6423-03	.3450	4.536	541.0
30	4.0000	.40000	60.000	.1380-01	.1140-01	.1540-01	.3299-03	.3299-03	.4466-03	.2400	3.150	540.5
30	4.0000	.42500	61.000	.9700-02	.6000-02	.1080-01	.2815-03	.2325-03	.3147-03	.1690	2.244	539.7

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 45

OH-74 (AEDC V418-B8A) B62C12F10M16H127E92V9R19

(RV8001)

RUN NUMBER	TR	E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
30	4.0000		.45000	62.000	.7500-02	.6200-02	.6400-02	.2186-03	.1806-03	.2444-03	.1320	1.708	539.4
30	4.0000		.47500	63.000	.6000-02	.4900-02	.6700-02	.1731-03	.1430-03	.1935-03	.1040	1.330	539.1
30	4.0000		.50000	64.000	.4600-02	.3800-02	.5100-02	.1322-03	.1092-03	.1477-03	.8000-01	.9880	539.0
30	4.0000		.52500	65.000	.4300-02	.3600-02	.4600-02	.1257-03	.1038-03	.1405-03	.7600-01	.9390	539.1
30	4.0000		.55000	66.000	.4000-02	.3300-02	.4500-02	.1158-03	.9869-04	.295-03	.7000-01	.8200	538.9
30	4.0000		.60000	67.000	.2600-02	.2200-02	.2900-02	.7638-04	.6311-04	.8536-04	.4600-01	.5200	538.2
30	4.0000		.65000	68.000	.1500-02	.1200-02	.1600-02	.4213-04	.3481-04	.4708-04	.2500-01	.2990	539.2
30	4.0000		.70000	69.000	.7000-03	.6000-03	.8000-03	.2028-04	.1675-04	.2266-04	.1200-01	.1360	539.8
30	4.0000		.75000	70.000	.8000-03	.7000-03	.9000-03	.2433-04	.2011-04	.2719-04	.1500-01	.1640	537.8
30	4.0000		.80000	71.000	.2000-03	.1000-03	.2000-03	.4687-05	.3872-05	.5238-05	.3000-02	.3400-01	538.8
30	4.0000		.87500	77.000	.3000-03	.3000-03	.4000-03	.9854-05	.8141-05	.1101-04	.6000-02	.7800-01	538.6
30	4.0000		.90000	78.000	.4000-03	.3000-03	.4000-03	.1024-04	.8456-05	.1144-04	.6000-02	.8000-01	538.9
30	4.0000		.92500	79.000	.5000-03	.4000-03	.5000-03	.1337-04	.1104-04	.1494-04	.8000-02	.1000+00	539.4
30	4.0000		.95000	80.000	.3000-02	.2500-02	.3300-02	.8605-04	.7101-04	.9622-04	.5200-01	.6060	540.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 46

OH-74 (AEDC V41B-B8A) 882C12F10H16W127E52V9R19

(RYB001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
31	7.960	34.82	298.1	1270.	-179.8	.0000	92.90	.3200-01	1.399	3759.	.2849-04	.7478-07

RUN NUMBER	RV/L X10 ⁸ /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175 .3383-01
31	1.432	.2893-01	.3383-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(970) BTU/ R FT ² SEC	H(110) BTU/ R FT ² SEC	H(1AH) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTMDT DEG. R /SEC	TH DEG. R
31	1.0000	.27500	1.0000	.1490-01	.1230-01	.1660-01	.4300-03	.3551-03	.4808-03	.2590	2.683	541.6
31	1.0000	.30000	2.0000	.1300-01	.1070-01	.1450-01	.3747-03	.3094-03	.4189-03	.2260	2.396	541.1
31	1.0000	.32500	3.0000	.1050-01	.8700-02	.1187-01	.3052-03	.2520-03	.3412-03	.1840	1.890	540.9
31	1.0000	.35000	4.0000	.1220-01	.1010-01	.1370-01	.3539-03	.2923-03	.3956-03	.2130	2.214	540.4
31	1.0000	.37500	5.0000	.1740-01	.1440-01	.1950-01	.5043-03	.4164-03	.5639-03	.3030	3.190	541.7
31	1.0000	.40000	6.0000	.2250-01	.1860-01	.2520-01	.6510-03	.5375-03	.7279-03	.3910	4.023	541.7
31	1.0000	.42500	7.0000	.1710-01	.1420-01	.1920-01	.4962-03	.4096-03	.5548-03	.2980	3.095	541.7
31	1.0000	.45000	8.0000	.2360-01	.1950-01	.2640-01	.6831-03	.5640-03	.7638-03	.4110	4.204	541.6
31	1.0000	.47500	9.0000	.2870-01	.2370-01	.3210-01	.8297-03	.6848-03	.9278-03	.4980	5.068	542.8
31	1.0000	.50000	10.000	.1900-01	.1570-01	.2120-01	.5491-03	.4534-03	.6139-03	.3300	3.350	541.4
31	1.0000	.52500	11.000	.2760-01	.2260-01	.3080-01	.7977-03	.6585-03	.8920-03	.4790	4.957	542.2
31	1.0000	.55000	12.000	.2390-01	.1970-01	.2670-01	.6909-03	.5704-03	.7724-03	.4160	4.175	541.6
31	1.0000	.60000	13.000	.1720-01	.1420-01	.1920-01	.4965-03	.4099-03	.5551-03	.2990	3.028	541.5
31	1.0000	.65000	14.000	.1580-01	.1300-01	.1760-01	.4558-03	.3764-03	.5095-03	.2740	2.783	541.0
31	1.0000	.70000	15.000	.7100-02	.5900-02	.8000-02	.2063-03	.1704-03	.2306-03	.1240	1.218	539.9
31	1.0000	.75000	16.000	.1500-02	.1200-02	.1700-02	.4341-04	.3586-04	.4651-04	.2600-01	.2660	539.1
31	1.0000	.80000	17.000	.1800-02	.1500-02	.2000-02	.5089-04	.4204-04	.5685-04	.3100-01	.2980	539.1
31	1.0000	.85000	18.000	.1530-01	.1260-01	.1710-01	.4423-03	.3552-03	.4916-03	.2660	3.120	542.0
31	2.0000	.28500	19.000	.1510-01	.1240-01	.1640-01	.4356-03	.3596-03	.4870-03	.2620	3.091	541.7
31	2.0000	.33700	20.000	.3010-01	.2490-01	.3370-01	.8722-03	.7197-03	.9755-03	.5230	6.167	543.4
31	2.0000	.39000	21.000	.2530-01	.2090-01	.2830-01	.7324-03	.6045-03	.8191-03	.4390	5.155	543.1
31	2.0000	.42600	22.000	.2050-01	.1690-01	.2290-01	.5924-03	.4890-03	.6624-03	.3560	3.968	542.2

DATE 07 JUL 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 47

(RVB0011)

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52VBR19

RUN NUMBER	TRAJ'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAM	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTADT DEG. R /SEC	TH DEG. R
31	2.0000	.53000	23.000	.1810-01	.1490-01	.2020-01	.5237-03	.4123-03	.5856-03	.3150	3.509	542.1
31	2.0000	.56700	24.000	.1170-01	.9700-02	.1310-01	.3381-03	.2792-03	.3779-03	.2040	2.217	540.7
31	2.0000	.62000	25.000	.8500-02	.7000-02	.9500-02	.2454-03	.2027-03	.2743-03	.1480	1.611	540.2
31	2.0000	.67000	26.000	.5700-02	.4700-02	.6400-02	.1651-03	.1364-03	.1846-03	.1000+00	1.085	539.7
31	2.0000	.70500	27.000	.3400-02	.2800-02	.3800-02	.9748-04	.8054-04	.1089-03	.5900-01	.6350	539.0
31	2.0000	.75000	28.000	.1000-02	.8000-03	.1100-02	.2856-04	.2362-04	.3191-04	.1700-01	1.900	536.1
31	2.0000	.80000	29.000	.1100-02	.9000-03	.1300-02	.3322-04	.2745-04	.3712-04	.2000-01	.2220	538.4
31	2.0000	.82400	30.000	.4000-03	.3000-03	.5000-03	.1169-04	.9658-05	.1308-04	.7000-02	.9900-01	538.7
31	3.0000	.20000	31.000	.3070-01	.2530-01	.3430-01	.8872-03	.7316-03	.9927-03	.5300	5.617	545.7
31	3.0000	.22500	32.000	.2650-01	.2180-01	.2960-01	.7056-03	.6315-03	.8565-03	.4580	5.124	544.9
31	3.0000	.25000	33.000	.2030-01	.1680-01	.2270-01	.5881-03	.4852-03	.6578-03	.3520	3.946	543.7
31	3.0000	.27500	34.000	.1580-01	.1300-01	.1760-01	.4557-03	.3761-03	.5096-03	.2740	3.280	542.5
31	3.0000	.30000	35.000	.1350-01	.1110-01	.1510-01	.3897-03	.3218-03	.4357-03	.2340	2.906	541.4
31	3.0000	.32500	36.000	.1990-01	.1640-01	.2220-01	.5749-03	.4747-03	.6428-03	.3460	4.058	541.8
31	3.0000	.35000	37.000	.3160-01	.2610-01	.3530-01	.9144-03	.7545-03	.1023-02	.5480	6.363	543.4
31	3.0000	.37500	38.000	.2890-01	.2380-01	.3230-01	.8358-03	.6897-03	.9348-03	.5010	5.880	543.2
31	3.0000	.40000	39.000	.1850-01	.1530-01	.2070-01	.5348-03	.4415-03	.5979-03	.3220	3.796	541.6
31	3.0000	.42500	40.000	.2390-01	.1970-01	.2670-01	.6920-03	.5712-03	.7739-03	.4150	4.927	542.6
31	3.0000	.45000	41.000	.1790-01	.1480-01	.2000-01	.5179-03	.4276-03	.5790-03	.3120	3.565	541.4
31	3.0000	.47500	42.000	.1440-01	.1190-01	.1600-01	.4153-03	.3430-03	.4643-03	.2500	2.790	540.8
31	3.0000	.50000	43.000	.1140-01	.9500-02	.1280-01	.3310-03	.2734-03	.3700-03	.1990	2.226	540.5
31	3.0000	.52500	44.000	.8500-02	.7000-02	.9500-02	.2461-03	.2033-03	.2750-03	.1480	1.744	539.9
31	3.0000	.55000	45.000	.7500-02	.6200-02	.8400-02	.2183-03	.1803-03	.2435-03	.1320	1.471	539.5
31	3.0000	.60000	46.000	.5200-02	.4300-02	.5800-02	.1512-03	.1250-03	.1690-03	.9100-01	.9950	539.2
31	3.0000	.65000	47.000	.3300-02	.2700-02	.3700-02	.9608-04	.7939-04	.1074-03	.5800-01	.6180	538.6
31	3.0000	.70000	48.000	.1400-02	.1100-02	.1500-02	.4012-04	.3316-04	.4482-04	.2400-01	.2690	537.9
31	3.0000	.75000	49.000	.9000-03	.7000-03	.1000-02	.2477-04	.2047-04	.2767-04	.1500-01	.1630	537.4
31	3.0000	.80000	50.000	.7000-03	.6000-03	.7000-03	.1930-04	.1595-04	.2156-04	.1200-01	1.250	536.4
31	3.0000	.85000	51.000	.1100-02	.9000-03	.1200-02	.3056-04	.2525-04	.3415-04	.1800-01	.2290	539.4
31	3.0000	.87500	52.000	.1500-02	.1300-02	.1700-02	.4407-04	.3640-04	.4926-04	.2700-01	.3300	539.6
31	3.0000	.90000	53.000	.1000-02	.8000-03	.1100-02	.2815-04	.2325-04	.3146-04	.1700-01	.2370	539.7
31	3.0000	.92500	54.000	.1200-02	.1000-02	.1300-02	.3361-04	.2776-04	.3756-04	.2000-01	.2660	539.5
31	3.0000	.95000	55.000	.2100-02	.1800-02	.2400-02	.6140-04	.5073-04	.6862-04	.3700-01	.3750	539.5
31	4.0000	.20000	71.000	.3460-01	.2950-01	.3630-01	.1001-02	.8251-03	.1121-02	.5950	6.794	547.9
31	4.0000	.22500	72.000	.2590-01	.2130-01	.2890-01	.7473-03	.6164-03	.8361-03	.4470	5.236	545.1
31	4.0000	.25000	73.000	.1950-01	.1620-01	.2190-01	.5663-03	.4673-03	.6334-03	.3390	3.991	543.6
31	4.0000	.27500	74.000	.2240-01	.1850-01	.2510-01	.6466-03	.5352-03	.7254-03	.3990	4.814	543.5
31	4.0000	.30000	56.000	.2340-01	.1930-01	.2620-01	.6770-03	.5587-03	.7572-03	.4050	5.321	543.5
31	4.0000	.32500	57.000	.2920-01	.2410-01	.3260-01	.8444-03	.6966-03	.9446-03	.5050	6.623	544.3
31	4.0000	.35000	58.000	.1970-01	.1630-01	.2210-01	.5705-03	.4710-03	.6391-03	.3430	4.495	542.3
31	4.0000	.37500	59.000	.1660-01	.1370-01	.1860-01	.4809-03	.3970-03	.5376-03	.2690	3.794	541.6
31	4.0000	.40000	60.000	.1190-01	.9800-02	.1330-01	.3436-03	.2838-03	.3840-03	.2070	2.717	540.5
31	4.0000	.42500	61.000	.8300-02	.6900-02	.9300-02	.2399-03	.1982-03	.2682-03	.1450	1.900	540.0

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75		OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE										PAGE 48
		OH-74 (AEDC V41B-B8A) 862C12F10H16H127E52V8R19										(RV8001)
RUN NUMBER	TRAIE	X/L	T/C NO	W/HREF R=0.9	W/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TM DEG. R
31	4.0000	.45000	62.000	.6100-02	.5000-02	.6800-02	.1766-03	.1459-03	.1973-03	.1070	1.384	539.3
31	4.0000	.47500	63.000	.4800-02	.4100-02	.5500-02	.1431-03	.1182-02	.1599-03	.8600-01	1.103	539.0
31	4.0000	.50000	64.000	.4100-02	.3400-02	.4600-02	.1180-03	.9747-04	.1318-03	.7100-01	.8840	539.0
31	4.0000	.52500	65.000	.3600-02	.3000-02	.4000-02	.1041-03	.8601-04	.1163-03	.6300-01	.7800	539.0
31	4.0000	.55000	66.000	.2900-02	.2400-02	.3200-02	.8319-04	.6874-04	.9296-04	.5000-01	.5910	538.7
31	4.0000	.60000	67.000	.1900-02	.1600-02	.2100-02	.5509-04	.4553-04	.6155-04	.3300-01	.3760	538.1
31	4.0000	.65000	68.000	.8000-03	.7000-03	.9000-03	.2358-04	.1949-04	.2635-04	.1400-01	.1680	538.1
31	4.0000	.70000	69.000	.7000-03	.6000-03	.8000-03	.2122-04	.1753-04	.2371-04	.1300-01	.1430	539.1
31	4.0000	.75000	70.000	.7000-03	.6000-03	.8000-03	.2020-04	.1669-04	.2257-04	.1200-01	.1360	538.4
31	4.0000	.80000	75.000	.4000-03	.4000-03	.5000-03	.1301-04	.1075-04	.1454-04	.8000-02	.9500-01	539.0
31	4.0000	.87500	77.000	.7000-03	.6000-03	.8000-03	.2137-04	.1766-04	.2388-04	.1300-01	.1700	538.4
31	4.0000	.90000	78.000	.1000-02	.9000-03	.1200-02	.3033-04	.2506-04	.5389-04	.1800-01	.2380	538.7
31	4.0000	.92500	79.000	.1100-02	.9000-03	.1300-02	.3260-04	.2694-04	.3642-04	.2000-01	.2440	538.7
31	4.0000	.95000	80.000	.3000-02	.2500-02	.3300-02	.8605-04	.7104-04	.9622-04	.5200-01	.6060	540.3

DATE 07 00:

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 49

04-74 (AEDC V41B-B8A) B62C12F10H16H127E52V8R19

(RV8001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 9.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
32	7.960	39.84	298.7	1269.	-179.8	.0000	92.80	.3200-01	1.402	3758.	.2857-04	.7473-07

RUN NUMBER	RN/L X10 ⁶	HREF BTU/ R FT ² SEC	STN NO R=
32	1.437	.2696-01	.3378-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(GTO) BTU/ R FT ² SEC	H(TO) BTU/ R FT ² SEC	H(TAM) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTROT DEG. R /SEC	TW DEG. R
32	1.0000	.27500	1.0000	.1420-01	.1170-01	.1580-01	.4098-03	.3301-03	.4581-03	.2460	2.557	540.9
32	1.0000	.30000	2.0000	.1240-01	.1020-01	.1380-01	.3583-03	.2959-03	.4006-03	.2160	2.292	540.4
32	1.0000	.32500	3.0000	.1140-01	.9400-02	.1270-01	.3302-03	.2727-03	.3691-03	.1990	2.046	539.9
32	1.0000	.35000	4.0000	.1650-01	.1370-01	.1650-01	.4787-03	.3953-03	.5351-03	.2880	2.991	540.3
32	1.0000	.37500	5.0000	.1870-01	.1540-01	.2090-01	.5414-03	.4470-03	.6053-03	.3250	3.423	541.2
32	1.0000	.40000	6.0000	.1860-01	.1530-01	.2080-01	.5382-03	.4444-03	.6017-03	.3240	3.328	540.8
32	1.0000	.42500	7.0000	.1890-01	.1560-01	.2120-01	.5486-03	.4529-03	.6133-03	.3300	3.420	541.3
32	1.0000	.45000	8.0000	.2930-01	.2400-01	.3260-01	.8433-03	.6962-03	.9430-03	.5060	5.180	541.7
32	1.0000	.47500	9.0000	.1850-01	.1530-01	.2070-01	.5369-03	.4433-03	.6003-03	.3230	3.285	541.3
32	1.0000	.50000	10.000	.2450-01	.2020-01	.2740-01	.7090-03	.5854-03	.7927-03	.4260	4.321	541.1
32	1.0000	.52500	11.000	.2530-01	.2090-01	.2830-01	.7331-03	.6053-03	.8197-03	.4400	4.466	541.4
32	1.0000	.55000	12.000	.1990-01	.1650-01	.2230-01	.5772-07	.4766-03	.6453-03	.3470	3.487	541.0
32	1.0000	.60000	13.000	.1710-01	.1410-01	.1920-01	.4961-03	.4096-03	.5546-03	.2980	3.025	540.9
32	1.0000	.65000	14.000	.8800-02	.7200-02	.9800-02	.2534-03	.2033-03	.2832-03	.1530	1.549	539.9
32	1.0000	.70000	15.000	.1400-02	.1200-02	.1600-02	.4779-04	.3402-04	.4601-04	.2500-01	.2440	538.4
32	1.0000	.75000	16.000	.1700-02	.1400-02	.1800-02	.4645-03	.3949-04	.5340-04	.2900-01	.2930	538.2
32	1.0000	.80000	17.000	.3000-02	.2500-02	.3400-02	.8691-04	.7181-04	.9713-04	.5200-01	.5090	539.0
32	1.0000	.85000	18.000	.1600-01	.1320-01	.1790-01	.4645-03	.3835-03	.5194-03	.2790	3.278	541.2
32	1.0000	.87500	19.000	.1980-01	.1530-01	.2210-01	.5719-03	.4722-03	.6395-03	.3440	4.056	541.3
32	1.0000	.90000	20.000	.2010-01	.1600-01	.2250-01	.5823-03	.4807-03	.6510-03	.3500	4.131	541.1
32	1.0000	.92500	21.000	.3160-01	.2610-01	.3540-01	.9163-03	.7562-03	.1025-02	.5490	6.443	542.8
32	1.0000	.95000	22.000	.2290-01	.1890-01	.2560-01	.6625-03	.5469-03	.7407-03	.3990	4.440	541.3

(RVB001)

OH-74 (AEDC V41B-88A) B62C12F10H164127E52V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
33	7.960	43.91	298.8	1269.	-179.8	.0000	92.80	.3200-01	1.402	3758.	.2858-04	.7473-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175
33	1.437	.2896-01	.3377-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H(9T0) BTU/ R FT2SEC	H(1T0) BTU/ R FT2SEC	H(1TAM) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
33	1.0000	.27500	1.0000	.1420-01	.1180-01	.1590-01	.4121-03	.3404-03	.4607-03	.2480	2.57F	540.3
33	1.0000	.30000	2.0000	.1260-01	.1040-01	.141 -01	.3650-03	.3015-03	.4080-03	.2200	2.337	540.0
33	1.0000	.32500	3.0000	.1250-01	.1030-01	.1403-01	.3618-03	.2988-03	.4044-03	.2180	2.242	539.9
33	1.0000	.35000	4.0000	.2050-01	.1690-01	.2290-01	.5936-03	.4902-03	.6636-03	.3570	3.707	540.5
33	1.0000	.37500	5.0000	.1830-01	.1510-01	.2040-01	.5296-03	.4373-03	.5921-03	.3180	3.350	541.1
33	1.0000	.40000	6.0000	.1710-01	.1410-01	.1910-01	.4958-03	.4095-03	.5542-03	.2980	3.070	540.1
33	1.0000	.42500	7.0000	.2440-01	.2020-01	.2730-01	.7071-03	.5838-03	.7905-03	.4250	4.409	541.2
33	1.0000	.45000	8.0000	.2320-01	.1920-01	.2590-01	.6720-03	.5549-03	.7513-03	.4040	4.136	540.9
33	1.0000	.47500	9.0000	.2120-01	.1750-01	.2360-01	.6126-03	.5058-03	.6849-03	.3680	3.750	541.1
33	1.0000	.50000	10.000	.2630-01	.2170-01	.2940-01	.7627-03	.6337-03	.8527-03	.4580	4.649	541.1
33	1.0000	.52500	11.000	.2340-01	.1930-01	.2610-01	.6772-03	.5992-03	.7571-03	.4070	4.129	540.9
33	1.0000	.55000	12.000	.1800-01	.1480-01	.2010-01	.5202-03	.4296-03	.5815-03	.3130	3.147	540.4
33	1.0000	.60000	13.000	.1210-01	.1000-01	.1350-01	.3505-03	.2895-03	.3918-03	.2110	2.142	539.8
33	1.0000	.65000	14.000	.3700-02	.3100-02	.4100-02	.1069-03	.8835-04	.1195-03	.6500-01	.6550	538.8
33	1.0000	.70000	15.000	.2300-02	.1900-02	.2600-02	.6745-04	.5574-04	.7537-04	.4100-01	.3990	538.1
33	1.0000	.75000	16.000	.3200-02	.2600-02	.3600-02	.9239-04	.7634-04	.1032-03	.5600-01	.5670	538.3
33	1.0000	.80000	17.000	.2400-02	.2000-02	.2700-02	.6969-04	.5758-04	.7785-04	.4200-01	.4090	538.4
33	2.0000	.28500	18.000	.1510-01	.1240-01	.1680-01	.4362-03	.3603-03	.4876-03	.2630	3.086	539.9
33	2.0000	.33700	19.000	.2550-01	.2110-01	.2860-01	.7415-03	.6123-03	.8290-03	.4460	5.264	540.8
33	2.0000	.39000	20.000	.2200-01	.1810-01	.2450-01	.6357-03	.5250-03	.7106-03	.3830	4.520	540.1
33	2.0000	.42600	21.000	.2920-01	.2410-01	.3260-01	.8453-03	.6979-03	.9451-03	.5080	5.961	541.4
33	2.0000	.47800	22.000	.2320-01	.1920-01	.2590-01	.6723-03	.5952-03	.7515-03	.4050	4.516	540.2

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 53

OH-74 (AEDC V418-B8A) B62C12F10H16W127E32V8R19

(RVB001)

RUN NUMBER	TRA. E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H/ISTO BTU/ R FT2SEC	H/ITO BTU/ R FT2SEC	H/ITAH BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
33	2.0000	.53000	23.000	.1200-01	.9900-02	.1340-01	.3480-03	.2875-03	.3890-03	.2100	2.343	539.2
33	2.0000	.56700	24.000	.0820-02	.6800-02	.9200-02	.2388-03	.1973-03	.2668-03	.1440	1.570	538.7
33	2.0000	.62000	25.000	.3900-02	.3200-02	.4300-02	.1124-03	.9291-04	.1256-03	.6800-01	.7400	538.1
33	2.0000	.67000	26.000	.1700-02	.1400-02	.1900-02	.4977-04	.4113-04	.5560-04	.3000-01	.3280	537.3
33	2.0000	.70500	27.000	.2700-02	.2200-02	.3000-02	.7840-04	.6481-04	.9759-04	.4700-01	.5120	537.2
33	2.0000	.75000	28.000	.3300-02	.2700-02	.3700-02	.9522-04	.7871-04	.1064-03	.5807-01	.6350	537.0
33	2.0000	.80000	29.000	.2100-02	.1800-02	.2400-02	.6171-04	.5101-04	.1684-04	.3700-01	.4130	537.3
33	2.0000	.82400	30.000	.6000-03	.5000-03	.6000-03	.1669-04	.1379-04	.1864-04	.1000-01	.1410	537.8
33	3.0000	.20000	31.000	.3150-01	.2600-01	.3530-01	.9131-03	.7530-03	.1022-02	.5450	5.779	545.2
33	3.0000	.22500	32.000	.2500-01	.2070-01	.2800-01	.7251-03	.5983-03	.8111-03	.4340	4.862	543.4
33	3.0000	.27500	33.000	.2020-01	.1670-01	.2250-01	.5847-03	.4827-03	.6538-03	.3510	3.936	541.6
33	3.0000	.30000	34.000	.1640-01	.1360-01	.1830-01	.4753-03	.3926-03	.5313-03	.2860	3.435	539.9
33	3.0000	.32500	35.000	.1910-01	.1580-01	.2130-01	.5532-03	.4570-03	.6182-03	.3340	4.139	539.1
33	3.0000	.35000	36.000	.2840-01	.2350-01	.3180-01	.8235-03	.6801-03	.9205-03	.4960	5.822	540.3
33	3.0000	.37500	37.000	.2470-01	.2040-01	.2760-01	.7147-03	.5904-03	.7989-03	.4300	5.006	539.8
33	3.0000	.40000	38.000	.2410-01	.1990-01	.2690-01	.6967-03	.5754-03	.7787-03	.4200	4.932	539.7
33	3.0000	.42500	39.000	.2240-01	.1850-01	.2500-01	.6480-03	.5353-03	.7242-03	.3910	4.617	539.1
33	3.0000	.45000	40.000	.1870-01	.1540-01	.2090-01	.5404-03	.4464-03	.6040-03	.3260	3.867	539.6
33	3.0000	.47500	41.000	.1580-01	.1300-01	.1760-01	.4563-03	.3770-03	.5098-03	.2750	3.195	539.5
33	3.0000	.50000	42.000	.1130-01	.9400-02	.1270-01	.3280-03	.2711-03	.3665-03	.1980	2.213	538.2
33	3.0000	.52500	43.000	.7200-02	.5900-02	.8000-02	.2078-03	.1717-03	.2322-03	.1250	1.402	538.1
33	3.0000	.55000	44.000	.5500-02	.4600-02	.6200-02	.1602-03	.1325-03	.1790-03	.9700-01	1.140	537.2
33	3.0000	.57500	45.000	.4900-02	.4000-02	.5400-02	.1409-03	.1164-03	.1574-03	.8500-01	.9520	537.5
33	3.0000	.60000	46.000	.2600-02	.2100-02	.2900-02	.7470-04	.6176-04	.8345-04	.4500-01	.4930	536.7
33	3.0000	.65000	47.000	.1100-02	.9000-03	.1200-02	.3161-04	.2613-04	.3530-04	.1900-01	.2040	536.1
33	3.0000	.70000	48.000	.2600-02	.2200-02	.2400-02	.5915-04	.4890-04	.6607-04	.3600-01	.3970	536.4
33	3.0000	.75000	49.000	.1600-02	.1400-02	.1800-02	.7647-04	.6322-04	.8542-04	.4600-01	.5050	536.6
33	3.0000	.80000	50.000	.1000-02	.8000-03	.1100-02	.4731-04	.3911-04	.5285-04	.2900-01	.3080	536.9
33	3.0000	.85000	51.000	.1800-02	.1500-02	.2000-02	.2922-04	.2414-04	.3265-04	.1800-01	.2190	536.8
33	3.0000	.87500	52.000	.2200-02	.1800-02	.2500-02	.5085-04	.4201-04	.5682-04	.3100-01	.3810	539.0
33	3.0000	.90000	53.000	.2200-02	.1800-02	.2500-02	.6375-04	.5266-04	.7125-04	.3800-01	.5350	539.6
33	3.0000	.92500	54.000	.2900-02	.2400-02	.3300-02	.8525-04	.7041-04	.9529-04	.5100-01	.6740	540.0
33	3.0000	.95000	55.000	.3000-02	.2500-02	.3300-02	.8592-04	.7097-04	.9604-04	.5200-01	.5250	539.7
33	4.0000	.20000	71.000	.3170-01	.2620-01	.3950-01	.9190-03	.7574-03	.1029-02	.5470	6.235	547.2
33	4.0000	.22500	72.000	.2690-01	.2220-01	.3010-01	.77-03	.6420-03	.8707-03	.4650	5.455	544.3
33	4.0000	.25000	73.000	.2410-01	.1990-01	.2690-01	.6958-03	.5749-03	.7793-03	.4170	4.896	543.1
33	4.0000	.27500	74.000	.2550-01	.2100-01	.2850-01	.7378-03	.6089-03	.8251-03	.4420	5.478	542.6
33	4.0000	.30000	75.000	.2820-01	.2330-01	.3150-01	.8162-03	.6737-03	.9178-03	.4900	6.422	542.3
33	4.0000	.32500	76.000	.2220-01	.1840-01	.2490-01	.6439-03	.5317-03	.7199-03	.3870	5.083	540.8
33	4.0000	.35000	77.000	.1940-01	.1600-01	.2170-01	.5622-03	.4644-03	.6285-03	.3390	4.446	540.0
33	4.0000	.37500	78.000	.1540-01	.1270-01	.1720-01	.4455-03	.3688-03	.4989-03	.2690	3.538	539.0
33	4.0000	.40000	79.000	.8600-02	.7100-02	.9600-02	.2483-03	.2052-03	.2774-03	.1500	1.972	538.2
33	4.0000	.42500	80.000	.5700-02	.4700-02	.6400-02	.1649-03	.1363-03	.1842-03	.1000-00	1.311	537.5

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75		04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE										PAGE 54
		(RV8001)										
RUN NUMBER	TRAJ.E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
33	4.0000	.45000	62.000	.4500-02	.3700-02	.5000-02	.1292-03	.1068-03	.1443-03	.7800-01	1.016	537.0
33	4.0000	.47500	63.000	.3500-02	.2900-02	.3900-02	.1015-03	.8393-04	.1134-03	.6100-01	.7850	537.1
33	4.0000	.50000	64.000	.2500-02	.2100-02	.2800-02	.7241-04	.5986-04	.8089-04	.4400-01	.5440	536.9
33	4.0000	.52500	65.000	.1900-02	.1600-02	.2100-02	.5540-04	.4580-04	.6139-04	.3400-01	.4170	536.8
33	4.0000	.55000	66.000	.1400-02	.1100-02	.1600-02	.4024-04	.3327-04	.4495-04	.2400-01	.2870	536.6
33	4.0000	.60000	67.000	.5000-03	.4000-03	.6000-03	.1556-04	.1286-04	.1738-04	.9000-01	.1060	536.3
33	4.0000	.65000	68.000	.7000-03	.6000-03	.8000-03	.2099-04	.1735-04	.2344-04	.1300-01	.1490	536.9
33	4.0000	.70000	69.000	.1600-02	.1300-02	.1800-02	.4645-04	.3839-04	.5190-04	.2800-01	.3140	537.8
33	4.0000	.75000	70.000	.2000-02	.1600-02	.2200-02	.5764-04	.4765-04	.6440-04	.3500-01	.3900	537.3
33	4.0000	.80000	75.000	.9000-03	.7000-03	.1000-02	.2464-04	.2036-04	.2753-04	.1500-01	.1800	538.1
33	4.0000	.85000	76.000	.8000-03	.6000-03	.9000-03	.2235-04	.1847-04	.2497-04	.1300-01	.1600	538.1
33	4.0000	.87500	77.000	.1100-02	.9000-03	.1200-02	.3107-04	.2568-04	.3472-04	.1900-01	.2470	538.1
33	4.0000	.90000	78.000	.3000-02	.2500-02	.3300-02	.8630-04	.7130-04	.9645-04	.5200-01	.6760	539.1
33	4.0000	.92500	79.000	.4800-02	.4000-02	.5400-02	.1402-03	.1158-03	.1567-03	.8400-01	1.047	539.8
33	4.0000	.95000	80.000	.4600-02	.3800-02	.5100-02	.1320-03	.1090-03	.1476-03	.7900-01	.9340	540.1

04-7% (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RV80011)

04-7% (AEDC V41B-88A) B62C12F10H16M127E52VGR19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RNO SLUGS /FT3	MU LB-SEC /FT2
40	7.980	19.73	419.6	1292.	-179.9	.0000	94.10	.4400-01	1.947	3792.	.3896-04	.7573-07
RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R=									
40	1.951	.3423-	2898-01									

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H1ST0 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAH1 BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
40	1.0000	.27500	1.0000	.1220-01	.1010-01	.1360-01	.4162-03	.3444-03	.4847-03	.2580	2.673	543.3
40	1.0000	.30000	2.0000	.1130-01	.9400-02	.1260-01	.3872-03	.3205-03	.4322-03	.2400	2.550	542.6
40	1.0000	.32500	3.0000	.9900-02	.8200-02	.1100-01	.3373-03	.2793-03	.3765-03	.2100	2.155	541.5
40	1.0000	.35000	4.0000	.9300-02	.7700-02	.1030-01	.3173-03	.2627-03	.3541-03	.1970	2.047	541.1
40	1.0000	.37500	5.0000	.8600-02	.7100-02	.9600-02	.2945-03	.2437-03	.3287-03	.1830	1.923	541.9
40	1.0000	.40000	6.0000	.1100-01	.8500-02	.1150-01	.3527-03	.2920-03	.3936-03	.2190	2.255	541.1
40	1.0000	.42500	7.0000	.9500-02	.7900-02	.1060-01	.3255-03	.2703-03	.3543-03	.2030	2.106	541.1
40	1.0000	.45000	8.0000	.1260-01	.1050-01	.1410-01	.4324-03	.3580-03	.4825-03	.2690	2.752	541.1
40	1.0000	.47500	9.0000	.1780-01	.1470-01	.1990-01	.6289-03	.5040-03	.6797-03	.3780	3.846	542.4
40	1.0000	.50000	10.000	.1690-01	.1400-01	.1880-01	.5775-03	.4780-03	.6445-03	.3590	3.635	541.9
40	1.0000	.52500	11.000	.1640-01	.1350-01	.1830-01	.5598-03	.4634-03	.6248-03	.3480	3.525	541.8
40	1.0000	.55000	12.000	.1820-01	.1510-01	.2030-01	.5230-03	.5157-03	.6954-03	.3970	3.887	541.8
40	1.0000	.56000	13.000	.2220-01	.1830-01	.2480-01	.7590-03	.6281-03	.8473-03	.4700	4.767	542.9
40	1.0000	.55000	14.000	.3350-01	.2780-01	.3750-01	.1151-02	.9521-03	.1285-02	.7120	7.207	544.4
40	1.0000	.70000	15.000	.5800-01	.4790-01	.6480-01	.1996-02	.1641-02	.2219-02	1.221	11.90	548.2
40	1.0000	.75000	16.000	.5490-01	.4530-01	.6130-01	.1879-02	.1552-02	.2100-02	1.153	11.65	549.0
40	1.0000	.80000	17.000	.2850-01	.2350-01	.3180-01	.9740-03	.8055-03	.1088-02	.6020	5.824	545.1
40	2.0000	.28500	18.000	.1150-01	.9600-02	.1300-01	.3973-03	.3287-03	.4435-03	.2460	2.885	543.5
40	2.0000	.33700	19.000	.1100-01	.9100-02	.1220-01	.3756-03	.3108-03	.4193-03	.2330	2.748	542.6
40	2.0000	.39000	20.000	.1180-01	.9700-02	.1310-01	.4026-03	.3333-03	.4434-03	.2500	2.950	541.9
40	2.0000	.42600	21.000	.1550-01	.1290-01	.1730-01	.5313-03	.4337-03	.5931-03	.3290	3.864	542.9
40	2.0000	.47800	22.000	.2140-01	.1770-01	.2390-01	.7339-03	.6073-03	.8193-03	.4550	5.071	542.9

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RVB0011)

OH-74 (AEDC V418-B8A) B62C12F10H16H127E52VBR19

RUN NUMBER	TRA/E	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H(10) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTNOT DEG. R /SEC	TH DEG. R
40	2.0000	.53000	23.000	.2940-01	.2930-01	.3290-01	.1008-02	.8138-03	.1128-02	.8230	6.932	545.1
40	2.0000	.58700	24.000	.3930-01	.3250-01	.4390-01	.1347-02	.1114-02	.1504-02	.8310	9.023	545.8
40	2.0000	.62000	25.000	.7100-01	.5860-01	.7930-01	.2429-02	.2006-02	.2716-02	1.487	16.10	550.7
40	2.0000	.67000	26.000	.4380-01	.3620-01	.4890-01	.1500-02	.1240-02	.1676-02	.9230	10.02	547.1
40	2.0000	.70500	27.000	.2560-01	.2120-01	.2860-01	.8774-03	.7259-03	.9796-03	.5430	5.847	543.7
40	2.0000	.75000	28.000	.1550-01	.1280-01	.1730-01	.5303-03	.4390-03	.5918-03	.3290	3.618	541.8
40	2.0000	.80000	29.000	.1370-01	.1130-01	.1530-01	.4679-03	.3673-03	.5222-03	.2910	3.210	541.6
40	2.0000	.82400	30.000	.4400-02	.3700-02	.4900-02	.1517-03	.1256-03	.1693-03	.9400-01	1.316	540.9
40	3.0000	.20000	31.000	.2860-01	.2360-01	.3190-01	.9775-03	.8075-03	.1092-02	.6000	6.348	549.1
40	3.0000	.22500	32.000	.2180-01	.1800-01	.2440-01	.7464-03	.6169-03	.8340-03	.4590	5.131	547.6
40	3.0000	.25000	33.000	.1520-01	.1260-01	.1700-01	.5216-03	.4313-03	.5826-03	.3220	3.599	545.8
40	3.0000	.27500	34.000	.1290-01	.1070-01	.1440-01	.4414-03	.3652-03	.4929-03	.2730	3.270	544.2
40	3.0000	.30000	35.000	.1170-01	.9400-02	.1270-01	.3880-03	.3210-03	.4331-03	.2400	2.977	543.1
40	3.0000	.32500	36.000	.1190-01	.9800-02	.1320-01	.4058-03	.3358-03	.4530-03	.2520	2.952	542.9
40	3.0000	.35000	37.000	.1230-01	.1020-01	.1370-01	.4206-03	.3481-03	.4695-03	.2610	3.028	542.7
40	3.0000	.37500	38.000	.1280-01	.1060-01	.1430-01	.4393-03	.3636-03	.4904-03	.2730	3.199	542.4
40	3.0000	.40000	39.000	.2160-01	.1780-01	.2410-01	.7379-03	.6107-03	.8238-03	.4570	5.396	542.8
40	3.0000	.42500	40.000	.2670-01	.2200-01	.2980-01	.9127-03	.7548-03	.1019-02	.5640	6.678	545.1
40	3.0000	.45000	41.000	.2820-01	.2330-01	.3150-01	.9657-03	.7989-03	.1078-02	.5970	6.825	544.2
40	3.0000	.47500	42.000	.3380-01	.2800-01	.3780-01	.1157-02	.9572-03	.1292-02	.7150	7.966	544.7
40	3.0000	.50000	43.000	.4610-01	.3810-01	.5150-01	.1577-02	.1303-02	.1761-02	.9710	10.80	546.8
40	3.0000	.52500	44.000	.6540-01	.5400-01	.7320-01	.2240-02	.1850-02	.2504-02	1.372	16.04	550.2
40	3.0000	.55000	45.000	.7320-01	.6040-01	.8190-01	.2507-02	.2068-02	.2804-02	1.528	16.94	553.1
40	3.0000	.58000	46.000	.3830-01	.3160-01	.4270-01	.1313-02	.1083-02	.1462-02	.8100	8.799	547.5
40	3.0000	.65000	47.000	.1950-01	.1620-01	.2180-01	.6888-03	.5536-03	.7465-03	.4150	4.409	542.0
40	3.0000	.70000	48.000	.1210-01	.1000-01	.1350-01	.4153-03	.3439-03	.4634-03	.2580	2.833	540.9
40	3.0000	.75000	49.000	.9000-02	.7500-02	.1010-01	.3094-03	.2562-03	.3452-03	.1930	2.096	540.6
40	3.0000	.80000	50.000	.8400-02	.6900-02	.9300-02	.2859-03	.2367-03	.3190-03	.1780	1.907	541.1
40	3.0000	.85000	51.000	.9300-02	.7700-02	.1040-01	.3188-03	.2639-03	.3558-03	.1980	2.452	542.1
40	3.0000	.87500	52.000	.1320-01	.5900-01	.2150-01	.6589-03	.5449-03	.7358-03	.4070	5.036	545.0
40	3.0000	.90000	53.000	.7800-02	.6500-02	.8700-02	.2676-03	.2214-03	.2987-03	.1660	2.310	543.2
40	3.0000	.92500	54.000	.1080-01	.9000-02	.1210-01	.3705-03	.3065-03	.4137-03	.2290	3.008	543.5
40	3.0000	.95000	55.000	.1250-01	.1030-01	.1390-01	.4268-03	.3532-03	.4765-03	.2640	2.679	543.2
40	4.0000	.20000	71.000	.3550-01	.2940-01	.3980-01	.1219-02	.1006-02	.1364-02	.7450	8.472	552.2
40	4.0000	.22500	72.000	.2670-01	.2210-01	.2990-01	.9145-03	.7553-03	.1022-02	.5600	6.552	549.9
40	4.0000	.25000	73.000	.2040-01	.1680-01	.2280-01	.6973-03	.5763-03	.7790-03	.4290	5.033	547.4
40	4.0000	.27500	74.000	.1610-01	.1330-01	.1800-01	.5525-03	.4568-03	.6171-03	.3410	4.215	545.9
40	4.0000	.30000	75.000	.1350-01	.1120-01	.1510-01	.4634-03	.3833-03	.5175-03	.2860	3.751	544.9
40	4.0000	.32500	76.000	.1550-01	.1280-01	.1730-01	.5294-03	.4379-03	.5911-03	.3280	4.293	544.1
40	4.0000	.35000	77.000	.2620-01	.2170-01	.2930-01	.8959-03	.7415-03	.1002-02	.5530	7.237	546.3
40	4.0000	.37500	78.000	.4220-01	.3480-01	.4710-01	.1444-02	.1193-02	.1613-02	.8880	11.62	547.7
40	4.0000	.40000	79.000	.5930-01	.4630-01	.6630-01	.2029-02	.1675-02	.2269-02	1.240	16.19	551.6
40	4.0000	.42500	81.000	.6910-01	.5700-01	.7730-01	.2367-02	.1953-02	.2647-02	1.442	18.81	553.5

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 58

OH-74 (AEDC V41B-B8A) B86C12F10M18M127E52V8R19

(RVB0011)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
41	7.980	24.87	420.0	-179.9	.0000	94.10	.4400-01	1.949	3794.	.5897-34	.7579-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175
41	1.951	.3425-01	.2898-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1GTO BTU/ R FT ² SEC	H1TO BTU/ R FT ² SEC	H1TAH BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTMDT DEG. R /SEC	TM DEG. R
41	1.0000	.27500	1.0000	.1340-01	.1110-01	.1490-01	.4587-03	.3799-03	.5117-03	.2860	2.969	540.3
41	1.0000	.30000	2.0000	.1200-01	.0900-02	.1340-01	.4106-03	.3401-03	.4581-03	.2560	2.723	539.8
41	1.0000	.32500	3.0000	.1080-01	.0600-02	.1210-01	.3715-03	.3078-03	.4144-03	.2320	2.387	539.4
41	1.0000	.35000	4.0000	.1060-01	.0400-02	.1190-01	.3646-03	.3020-03	.4066-03	.2280	2.366	539.0
41	1.0000	.37500	5.0000	.1110-01	.0200-02	.1240-01	.3805-03	.3152-03	.4245-03	.2370	2.500	539.9
41	1.0000	.40000	6.0000	.1150-01	.0100-02	.1280-01	.3944-03	.3267-03	.4399-03	.2460	2.534	539.3
41	1.0000	.42500	7.0000	.1600-01	.1330-01	.1790-01	.5494-03	.4549-03	.6130-03	.3420	3.551	540.8
41	1.0000	.45000	8.0000	.1890-01	.1570-01	.2110-01	.6482-03	.5368-03	.7232-03	.4040	4.134	540.7
41	1.0000	.47500	9.0000	.1850-01	.1540-01	.2080-01	.6372-03	.5276-03	.7111-03	.3960	4.037	541.7
41	1.0000	.50000	10.000	.2010-01	.1660-01	.2240-01	.6870-03	.5688-03	.7667-03	.4270	4.335	541.5
41	1.0000	.52500	11.000	.2440-01	.2020-01	.2730-01	.8365-03	.6924-03	.9377-03	.5200	5.265	542.6
41	1.0000	.55000	12.000	.2800-01	.2320-01	.3120-01	.9582-03	.7931-03	.1070-02	.5950	5.973	542.9
41	1.0000	.60000	13.000	.5640-01	.4660-01	.6300-01	.1932-02	.1596-02	.2158-02	1.188	12.01	548.4
41	1.0000	.65000	14.000	.4110-01	.3400-01	.4590-01	.1407-02	.1164-02	.1572-02	.8700	8.802	545.6
41	1.0000	.70000	15.000	.1640-01	.1350-01	.1830-01	.5604-03	.4638-03	.256-03	.3480	3.399	543.3
41	1.0000	.75000	16.000	.1190-01	.9100-02	.1220-01	.3756-03	.3109-03	.91-03	.2340	2.367	541.9
41	1.0000	.80000	17.000	.7700-02	.6400-02	.8600-02	.2648-03	.2192-03	.2956-03	1.650	1.595	542.3
41	1.0000	.85000	18.000	.1450-01	.1200-01	.1620-01	.4967-03	.4115-03	.5540-03	3.100	3.647	539.0
41	2.0000	.33700	19.000	.1270-01	.1060-01	.1420-01	.4365-03	.3617-03	.4868-03	.2720	3.226	538.4
41	2.0000	.39000	20.000	.1880-01	.1560-01	.2100-01	.6437-03	.5333-03	.7180-02	.4020	4.750	539.2
41	2.0000	.42600	21.000	.2490-01	.2060-01	.2780-01	.8537-03	.7068-03	.9526-03	.5310	6.239	541.3
41	2.0000	.47800	22.000	.3690-01	.3050-01	.4120-01	.1264-02	.1046-02	.1410-02	.7850	8.744	542.8

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 59

(RVB001)

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52VBR19

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T0 BTU/ R F12SEC	H1T01 BTU/ R F12SEC	H1T4M1 BTU/ R F12SEC	GDOT BTU/ F12SEC	DTMDT DEG. R /SEC	TH DEG. R
41	2.0000	.53000	23.000	.6260-01	.5170-01	.7000-01	.2146-02	.1772-02	.2399-02	1.317	14.63	549.9
41	2.0000	.56700	24.000	.4080-01	.3380-01	.4560-01	.1398-02	.1156-02	.1561-02	.8650	9.390	545.3
41	2.0000	.62000	25.000	.1920-01	.1590-01	.2150-01	.6588-03	.5434-03	.7353-03	4.100	4.455	542.1
41	2.0000	.67000	26.000	.1310-01	.1080-01	.1460-01	.4479-03	.3709-03	.4999-03	.2790	3.034	541.3
41	2.0000	.70500	27.000	.9200-02	.7600-02	.1030-01	.3162-03	.2619-03	.3528-03	.1970	2.125	540.3
41	2.0000	.75000	28.000	.6700-02	.5600-02	.7500-02	.2309-03	.1913-03	.2576-03	.1440	1.586	539.4
41	2.0000	.80000	29.000	.5000-02	.4200-02	.5600-02	.1722-03	.1427-03	.1922-03	.1070	1.188	539.8
41	2.0000	.82400	30.000	.1400-02	.1200-02	.1600-02	.4788-04	.3965-04	.5342-04	.3000-01	.4160	540.9
41	3.0000	.20000	31.000	.3010-01	.2430-01	.3360-01	.1031-02	.8620-03	.1151-02	.6350	6.729	547.3
41	3.0000	.22500	32.000	.2520-01	.2080-01	.2810-01	.8623-03	.7135-03	.9628-03	.5350	5.985	543.8
41	3.0000	.25000	33.000	.1900-01	.1580-01	.2120-01	.6821-03	.5401-03	.7276-03	.4060	4.557	540.6
41	3.0000	.27500	34.000	.1490-01	.1240-01	.1670-01	.5115-03	.4238-03	.5705-03	.3200	3.839	538.8
41	3.0000	.30000	35.000	.1280-01	.1060-01	.1430-01	.4393-03	.3641-03	.4899-03	.2750	3.414	537.7
41	3.0000	.32500	36.000	.1370-01	.1140-01	.1530-01	.4710-03	.3903-03	.5252-03	.2950	3.468	537.8
41	3.0000	.35000	37.000	.1560-01	.1290-01	.1740-01	.5370-03	.4417-03	.5945-03	.3340	3.882	538.0
41	3.0000	.37500	38.000	.2600-01	.2150-01	.2900-01	.8910-03	.7380-03	.9940-03	.5560	6.530	539.9
41	3.0000	.40000	39.000	.3210-01	.2650-01	.3580-01	.1098-02	.9094-03	.1226-02	.6830	8.063	541.7
41	3.0000	.42500	40.000	.4600-01	.3800-01	.5140-01	.1575-02	.1303-02	.1759-02	.9760	11.56	544.3
41	3.0000	.45000	41.000	.6050-01	.5000-01	.6750-01	.2071-02	.1713-02	.2314-02	1.278	14.59	548.5
41	3.0000	.47500	42.000	.5990-01	.4950-01	.6690-01	.2052-02	.1695-02	.2293-02	1.261	14.01	548.9
41	3.0000	.50000	43.000	.3930-01	.3250-01	.4390-01	.1345-02	.1113-02	.1502-02	.8330	9.279	544.4
41	3.0000	.52500	44.000	.2130-01	.1770-01	.2380-01	.7302-03	.6046-03	.8149-03	.4540	5.335	541.1
41	3.0000	.55000	45.000	.1560-01	.1290-01	.1740-01	.5346-03	.4427-03	.5966-03	.3330	3.715	541.1
41	3.0000	.57500	46.000	.1030-01	.8500-02	.1150-01	.3518-03	.2914-03	.3925-03	.2130	2.390	539.9
41	3.0000	.60000	47.000	.8500-02	.7100-02	.9500-02	.2927-03	.2424-03	.3265-03	.1830	1.942	539.7
41	3.0000	.70000	48.000	.5800-02	.4800-02	.6400-02	.1978-03	.1639-03	.2206-03	.1240	1.366	539.9
41	3.0000	.75000	49.000	.3500-02	.3000-02	.4100-02	.1249-03	.1035-03	.1393-03	.7800-01	.8510	539.5
41	3.0000	.80000	50.000	.2000-02	.1600-02	.2200-02	.6798-04	.5634-04	.7582-04	.4300-01	.4570	539.1
41	3.0000	.85000	51.000	.3100-02	.2600-02	.3500-02	.1077-03	.8920-04	.1202-03	.6700-01	.8310	541.1
41	3.0000	.87500	52.000	.8000-02	.6600-02	.8900-02	.2745-03	.2272-03	.3054-03	.1710	2.113	542.2
41	3.0000	.90000	53.000	.8000-02	.6500-02	.8900-02	.2731-03	.2260-03	.3049-03	.1700	2.363	542.7
41	3.0000	.92500	54.000	.7500-02	.6300-02	.8300-02	.2555-03	.2115-03	.2852-03	.1590	2.081	542.6
41	3.0000	.95000	55.000	.6800-02	.5600-02	.7600-02	.2319-03	.1920-03	.2599-03	.1440	1.461	542.0
41	4.0000	.20000	71.000	.3750-01	.3100-01	.4190-01	.1284-02	.1060-02	.1435-02	.7870	8.959	550.9
41	4.0000	.22500	72.000	.2820-01	.2340-01	.3160-01	.9703-03	.8021-03	.1094-02	.5960	7.007	546.9
41	4.0000	.25000	73.000	.2150-01	.1780-01	.2410-01	.7379-03	.6104-03	.8239-03	.4570	5.357	544.4
41	4.0000	.27500	74.000	.1790-01	.1490-01	.2000-01	.6147-03	.5088-03	.6862-03	.3820	4.726	542.9
41	4.0000	.30000	75.000	.1650-01	.1370-01	.1850-01	.5365-03	.4022-03	.6311-03	.3530	4.639	540.1
41	4.0000	.32500	77.000	.2850-01	.2350-01	.3180-01	.9771-03	.8089-03	.1090-02	.6070	7.969	542.0
41	4.0000	.35000	78.000	.4990-01	.4110-01	.5560-01	.1704-02	.1409-02	.1904-02	1.051	13.75	547.0
41	4.0000	.37500	79.000	.5560-01	.4680-01	.6320-01	.1938-02	.1602-02	.2165-02	1.193	15.60	548.3
41	4.0000	.40000	80.000	.3380-01	.2730-01	.3770-01	.1157-02	.9570-03	.1291-02	.7170	9.403	543.5
41	4.0000	.42500	81.000	.1990-01	.1640-01	.2220-01	.6805-03	.5634-03	.7595-03	.4230	5.553	541.8

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 51

OH-74 (AEDC V41B-BBA) B62C12F10M15H127E52VBR19

(RV8C01)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	O PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
42	7.980	29.87	419.1	1293.	-179.9	.0000	94.10	.4400-01	1.945	3794.	.3889-04	.7579-07
RUN NUMBER	F4/L X10.6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175									
42	1.947	.3422-01	.2901-01									

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAH) BTU/ R FT2SEC	DOOT BTU/ R FT2SEC	DTWOT DEG. R /SEC	TM DEG. R
42	1.0000	.27500	1.0000	.1290-01	.1070-01	.1440-01	.4428-03	.3667-03	.4941-03	.2760	2.852	541.0
42	1.0000	.30000	2.0000	.1170-01	.9700-02	.1300-01	.3995-03	.3308-03	.4457-03	.2490	2.645	540.7
42	1.0000	.32500	3.0000	.1170-01	.9700-02	.1300-01	.3990-03	.3305-03	.4452-03	.2490	2.559	540.3
42	1.0000	.35000	4.0000	.1190-01	.9900-02	.1330-01	.4075-03	.3375-03	.4466-03	.2540	2.639	539.9
42	1.0000	.37500	5.0000	.1070-01	.9800-02	.1190-01	.3654-03	.3026-03	.4077-03	.2280	2.397	540.6
42	1.0000	.40000	6.0000	.1860-01	.1540-01	.2070-01	.6354-03	.5261-03	.7090-03	.3960	4.068	541.1
42	1.0000	.42500	7.0000	.1930-01	.1590-01	.2150-01	.6591-03	.5456-03	.7355-03	.4100	4.253	541.7
42	1.0000	.45000	8.0000	.2110-01	.1750-01	.2350-01	.7231-03	.5986-03	.8070-03	.4500	4.601	541.8
42	1.0000	.47500	9.0000	.2060-01	.1700-01	.2290-01	.7033-03	.5822-03	.7850-03	.4370	4.451	542.2
42	1.0000	.50000	10.000	.2550-01	.2440-01	.3300-01	.1011-02	.8362-03	.1128-02	.6270	6.350	543.4
42	1.0000	.52500	11.000	.3070-01	.2540-01	.3420-01	.1049-02	.8679-03	.1171-02	.6500	6.581	544.2
42	1.0000	.55000	12.000	.3340-01	.2760-01	.3730-01	.1142-02	.9449-03	.1205-02	.7070	7.097	544.4
42	1.0000	.60000	13.000	.2100-01	.1740-01	.2340-01	.7182-03	.5943-03	.8018-03	.4450	4.510	543.8
42	1.0000	.65000	14.000	.1940-01	.1510-01	.2170-01	.6642-03	.5497-03	.7414-03	.4120	4.177	542.9
42	1.0000	.70000	15.000	.1510-01	.1250-01	.1690-01	.5168-03	.4278-03	.5768-03	.3210	3.140	542.4
42	1.0000	.75000	16.000	.6200-02	.5100-02	.6900-02	.2114-03	.1751-03	.2359-03	.1320	1.336	540.5
42	1.0000	.80000	17.000	.1600-02	.1400-02	.1900-02	.5624-04	.4657-04	.6276-04	.3500-01	.3400	540.8
42	2.0000	.29500	18.000	.1470-01	.1220-01	.1640-01	.5025-03	.4161-03	.5519-03	.3130	3.675	540.9
42	2.0000	.33700	19.000	.1230-01	.1020-01	.1370-01	.4194-03	.3474-03	.4680-03	.2610	3.088	540.3
42	2.0000	.33000	20.000	.2530-01	.2170-01	.2930-01	.6990-03	.7441-03	.1003-02	.5590	6.591	542.3
42	2.0000	.42500	21.000	.3070-01	.2540-01	.3420-01	.1050-02	.8683-03	.1172-02	.6500	7.624	544.1
42	2.0000	.47800	22.000	.4030-01	.3330-01	.4500-01	.1378-02	.1140-02	.1539-02	.8530	9.495	544.9

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 62

(RV8001)

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-88A) B62C12F10H16M127E52V8R19

RUN NUMBER	TRAJ'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H(9TO) BTU/ R F12SEC	H(10I) BTU/ R F12SEC	H(TAH) BTU/ R F12SEC	QDOT BTU/ F12SEC	DTMDT DEG. R /SEC	TH DEG. R
42	2.0000	.53000	23.000	.2140-01	.1770-01	.2390-01	.7326-03	.6083-03	.8178-03	.4550	5.066	543.2
42	2.0000	.56700	24.000	.1620-01	.1340-01	.1910-01	.5538-03	.4584-03	.6181-03	.3440	3.743	542.3
42	2.0000	.62000	25.000	.1080-01	.0900-02	.1200-01	.3678-03	.3046-03	.4105-03	.2290	2.493	541.1
42	2.0000	.67000	26.000	.9000-02	.7400-02	.1000-01	.3066-03	.2539-03	.3420-03	.1910	2.083	539.9
42	2.0000	.70500	27.000	.7300-02	.6000-02	.8100-02	.2494-03	.2066-03	.2783-03	.1560	1.679	539.8
42	2.0000	.75000	28.000	.3600-02	.3000-02	.4100-02	.1246-03	.1033-03	.1390-03	.7800-01	.8560	539.2
42	2.0000	.80000	29.000	.1500-02	.1200-02	.1700-02	.5148-04	.4284-04	.5742-04	.3200-01	.3250	539.4
42	2.0000	.82400	30.000	.3000-03	.3000-03	.4000-03	.1165-04	.9847-05	.1300-04	.7000-02	.1010	540.2
42	3.0000	.20000	31.000	.2960-01	.2440-01	.3300-01	.1011-02	.8358-03	.1130-02	.6230	6.593	548.0
42	3.0000	.22500	32.000	.2510-01	.2080-01	.2800-01	.8593-03	.7106-03	.9697-03	.5310	7.938	545.8
42	3.0000	.25000	33.000	.2010-01	.1670-01	.2250-01	.6892-03	.4344-03	.5853-03	.4280	4.793	542.9
42	3.0000	.27500	34.000	.1530-01	.1270-01	.1710-01	.5246-03	.3980-03	.5361-03	.3000	3.715	540.3
42	3.0000	.30000	35.000	.1400-01	.1160-01	.1570-01	.4805-03	.3980-03	.5595-03	.3180	3.740	540.1
42	3.0000	.32500	36.000	.1490-01	.1240-01	.1650-01	.5105-03	.4228-03	.5983-03	.5340	6.209	541.4
42	3.0000	.35000	37.000	.2510-01	.2080-01	.2800-01	.8587-03	.7110-03	.9583-03	.7500	8.915	542.8
42	3.0000	.37500	38.000	.3580-01	.2960-01	.3990-01	.1224-02	.1013-02	.1366-02	.1940	2.161	539.9
42	3.0000	.40000	39.000	.2980-01	.2470-01	.3330-01	.1021-02	.8451-03	.1140-02	.6340	7.470	543.4
42	3.0000	.42500	40.000	.2950-01	.2440-01	.3290-01	.1008-02	.8343-03	.1126-02	.6250	7.405	544.0
42	3.0000	.45000	41.000	.2750-01	.2310-01	.3120-01	.9558-03	.7911-03	.1057-02	.5930	5.784	542.8
42	3.0000	.47500	42.000	.1970-01	.1630-01	.2200-01	.6732-03	.5573-03	.7514-03	.4190	4.668	541.9
42	3.0000	.50000	43.000	.1530-01	.1270-01	.1710-01	.5230-03	.4330-03	.5836-03	.3250	3.629	541.5
42	3.0000	.52500	44.000	.1030-01	.0800-02	.1150-01	.3541-03	.2933-03	.3951-03	.2210	2.594	540.2
42	3.0000	.55000	45.000	.9100-02	.7500-02	.1010-01	.3103-03	.2570-03	.3462-03	.1940	2.144	539.3
42	3.0000	.57500	46.000	.6400-02	.5300-02	.7200-02	.2196-03	.1820-03	.2450-03	.1370	1.494	538.8
42	3.0000	.60000	47.000	.5200-02	.4300-02	.5600-02	.1787-03	.1481-03	.1993-03	.1120	1.188	538.5
42	3.0000	.62500	48.000	.2800-02	.2300-02	.3100-02	.9582-04	.7940-04	.1069-03	.6000-01	.6630	538.5
42	3.0000	.65000	49.000	.1200-02	.1000-02	.1300-02	.4123-04	.3417-04	.4598-04	.2600-01	.2810	537.9
42	3.0000	.67500	50.000	.9000-03	.7000-03	.1000-02	.2983-04	.2472-04	.3327-04	.1900-01	.2000	539.5
42	3.0000	.70000	51.000	.2400-02	.2000-02	.2700-02	.8213-04	.6802-04	.9164-04	.5100-01	.6350	540.4
42	3.0000	.72500	52.000	.1900-02	.1600-02	.2100-02	.6467-04	.5355-04	.7217-04	.4000-01	.4690	541.4
42	3.0000	.75000	53.000	.2200-02	.1800-02	.2500-02	.7583-04	.6278-04	.8463-04	.4700-01	.6370	541.8
42	3.0000	.77500	54.000	.2600-02	.2200-02	.2900-02	.8901-04	.7369-04	.9934-04	.5500-01	.7260	541.9
42	3.0000	.80000	55.000	.2000-02	.1700-02	.2300-02	.6930-04	.5714-04	.7700-04	.4300-01	.4360	541.1
42	4.0000	.20000	71.000	.3530-01	.3000-01	.4060-01	.1243-02	.1026-02	.1389-02	.7620	8.673	550.8
42	4.0000	.22500	72.000	.2720-01	.2250-01	.3040-01	.9306-03	.7692-03	.1040-02	.5740	6.714	547.3
42	4.0000	.25000	73.000	.2100-01	.1740-01	.2350-01	.7191-03	.5949-03	.8030-03	.4450	5.216	544.8
42	4.0000	.27500	74.000	.2070-01	.1710-01	.2310-01	.7090-03	.5866-03	.7916-03	.4350	5.439	543.9
42	4.0000	.30000	75.000	.2040-01	.1690-01	.2280-01	.6977-03	.5775-03	.7718-03	.4330	5.683	542.6
42	4.0000	.32500	76.000	.2040-01	.1690-01	.2280-01	.6977-03	.5775-03	.7718-03	.4330	5.683	542.6
42	4.0000	.35000	77.000	.3480-01	.2880-01	.3890-01	.1191-02	.9847-03	.1330-02	.7360	9.635	545.7
42	4.0000	.37500	78.000	.2080-01	.1720-01	.2320-01	.7104-03	.5880-03	.7329-03	.4410	5.787	542.6
42	4.0000	.40000	79.000	.1510-01	.1250-01	.1680-01	.5154-03	.4267-03	.5751-03	.3210	4.208	541.4
42	4.0000	.42500	80.000	.1020-01	.8500-02	.1140-01	.3504-03	.2932-03	.3909-03	.2180	2.867	540.4

(RV8001)

DATE 07 OCT 75 OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-B8A) B62C12F10M16H127E52V8R19

RUN NUMBER	TRA/E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(ISO) BTU/ R FT2SEC	H(ISO) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	OTMDT DEG. R /SEC	TW DEG. R
42	4.0000	.45000	62.000	.7800-02	.6400-02	.8700-02	.2657-03	.2701-03	.2965-03	.1660	2.152	539.8
42	4.0000	.47500	63.000	.6000-02	.5000-02	.6700-02	.2050-03	.1698-03	.2287-03	.1280	1.632	539.7
42	4.0000	.50000	64.000	.4400-02	.3600-02	.4900-02	.1502-03	.1245-03	.1676-03	.9400-01	1.164	539.1
42	4.0000	.52500	65.000	.4300-02	.3600-02	.4800-02	.1483-03	.1229-03	.1654-03	.9300-01	1.149	539.1
42	4.0000	.55000	66.000	.4100-02	.3400-02	.4600-02	.1405-03	.1164-03	.1567-03	.8800-01	1.031	539.2
42	4.0000	.60000	67.000	.2400-02	.2000-02	.2700-02	.8365-04	.6931-04	.9329-04	.5200-01	.5900	538.5
42	4.0000	.65000	68.000	.1500-02	.1300-02	.1700-02	.5200-04	.4309-04	.5800-04	.3300-01	.3820	538.2
42	4.0000	.70000	69.000	.7000-03	.6000-03	.7000-03	.2279-04	.1889-04	.2542-04	.1400-01	.1590	538.5
42	4.0000	.75000	70.000	.1100-02	.9000-03	.1200-02	.3600-04	.2983-04	.4015-04	.2300-01	.2520	538.1
42	4.0000	.80000	75.000	.6000-03	.5000-03	.7000-03	.2099-04	.1739-04	.2341-04	.1300-01	.1580	539.1
42	4.0000	.85000	76.000	.1000-03	.1000-03	.1000-03	.3371-05	.2792-05	.3760-05	.2000-02	.2500-01	539.6
42	4.0000	.87500	77.000	.8000-03	.7000-03	.9000-03	.2899-04	.2367-04	.3188-04	.1800-01	.2340	539.5
42	4.0000	.90000	78.000	.1200-02	.1000-02	.1300-02	.3945-04	.3268-04	.4402-04	.2500-01	.3190	539.9
42	4.0000	.92500	79.000	.6000-03	.5000-03	.7000-03	.2056-04	.1703-04	.2294-04	.1300-01	.1590	540.2
42	4.0000	.95000	80.000	.6000-03	.5000-03	.7000-03	.2046-04	.1695-04	.2282-04	.1300-01	.1500	540.0

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITTER FUSELAGE PORT SIDE

PAGE 64

OH-74 (AEDC V41B-BBA) B62C12F10M16M127E52VBR19

(RVB001)

ORBITTER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

FN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
43	7.980	34.85	418.8	1293.	-179.9	.0000	94.10	.4400-01	1.943	3794.	.3886-04	.7579-07

RUN NUMBER	RN/L	HREF BTU/ R FT ² SEC /FT	STN NO R= .0175 .2902-01
43	1.945	.3420-01	.2902-01

...TEST DATA...

RUN NUMBER	TRACE	X.L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1ST01 BTU/ R FT ² SEC	H1T01 BTU/ R FT ² SEC	H1TAM) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTMDT DEG. R /SEC	TH DEG. R
43	1.0000	.27500	1.0000	.1470-01	.1210-01	.1640-01	.5014-03	.4151-03	.5595-03	.3120	3.238	541.3
43	1.0000	.30000	2.0000	.1340-01	.1110-01	.1500-01	.4598-03	.3807-03	.5130-03	.2860	3.041	541.1
43	1.0000	.32500	3.0000	.1110-01	.9200-02	.1240-01	.3794-03	.3142-03	.4233-03	.2360	2.432	540.5
43	1.0000	.35000	4.0000	.1200-01	.1000-01	.1340-01	.4117-03	.3410-03	.4593-03	.2570	2.664	540.4
43	1.0000	.37500	5.0000	.1690-01	.1400-01	.1890-01	.5786-03	.4790-03	.6458-03	.3600	3.782	542.2
43	1.0000	.40000	6.0000	.2140-01	.1770-01	.2390-01	.7327-03	.6065-03	.8177-03	.4560	4.682	541.9
43	1.0000	.42500	7.0000	.1530-01	.1270-01	.1710-01	.5229-03	.4328-03	.5936-03	.3250	3.369	542.4
43	1.0000	.45000	8.0000	.2130-01	.1770-01	.2380-01	.7303-03	.6045-03	.8151-03	.4540	4.642	542.2
43	1.0000	.47500	9.0000	.2700-01	.2230-01	.3010-01	.9222-03	.7630-03	.1030-02	.5710	5.813	544.0
43	1.0000	.50000	10.000	.1890-01	.1560-01	.2100-01	.6450-03	.5339-03	.7199-03	.4010	4.061	542.4
43	1.0000	.52500	11.000	.2800-01	.2320-01	.3130-01	.9581-03	.7927-03	.1070-02	.5940	6.014	543.9
43	1.0000	.55000	12.000	.2550-01	.2110-01	.2850-01	.8731-03	.7225-03	.9747-03	.5420	5.436	543.5
43	1.0000	.57500	13.000	.1850-01	.1530-01	.2070-01	.6341-03	.5247-03	.7079-03	.3930	3.982	543.6
43	1.0000	.60000	14.000	.1850-01	.1500-01	.2020-01	.6202-03	.5132-03	.6923-03	.3250	3.899	543.1
43	1.0000	.65000	15.000	.7600-02	.6300-02	.8500-02	.2590-03	.2145-03	.2891-03	.1610	1.578	541.1
43	1.0000	.70000	16.000	.1500-02	.1200-02	.1700-02	.5107-04	.4231-04	.5599-04	.3200-01	.3230	539.9
43	1.0000	.75000	17.000	.1800-02	.1500-02	.2000-02	.6174-04	.5113-04	.6888-04	.3800-01	.3740	540.3
43	2.0000	.80000	18.000	.1560-01	.1290-01	.1740-01	.5334-03	.4417-03	.5912-03	.3320	3.900	541.1
43	2.0000	.85000	19.000	.1380-01	.1150-01	.1540-01	.4733-03	.3920-03	.5281-03	.2950	3.482	540.7
43	2.0000	.90000	20.000	.2750-01	.2270-01	.3070-01	.9397-03	.7777-03	.1049-02	.5830	6.878	543.1
43	2.0000	.95000	21.000	.2520-01	.2090-01	.2810-01	.9524-03	.7137-03	.5626-03	.5350	6.278	543.1
43	2.0000	1.0000	22.000	.2220-01	.1840-01	.2440-01	.7595-03	.6287-03	.8478-03	.4720	5.260	542.5

(RVB0011)

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-B8A) B62C12F10H16W127E52V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H(9TO) FT2SEC	H(10) FT2SEC	H(11A) BTU/R	QDOT BTU/FT2SEC	OTWOT DEG/R	TH DEG/R
43	2.0000	.53000	23.000	.2050-01	.1700-01	.2290-01	.7022-03	.5812-03	.7839-03	.4360	4.859	542.9
43	2.0000	.56700	24.000	.1380-01	.1140-01	.1540-01	.4717-03	.3905-03	.5264-03	.2930	3.193	541.6
43	2.0000	.62000	25.000	.9100-02	.7500-02	.1010-01	.3098-03	.2566-03	.3457-03	.1930	2.101	540.6
43	2.0000	.67000	26.000	.5900-02	.4900-02	.6500-02	.2007-03	.1663-03	.2239-03	.1250	1.363	540.0
43	2.0000	.70500	27.000	.3700-02	.3100-02	.4100-02	.1263-03	.1047-03	.1409-03	.7900-01	.8510	539.3
43	2.0000	.75000	28.000	.1300-02	.1000-02	.1400-02	.4285-04	.3551-04	.4778-04	.2700-01	.2950	538.0
43	2.0000	.80000	29.000	.1600-02	.1300-02	.1800-02	.5398-04	.4472-04	.6020-04	.3400-01	.3730	538.9
43	2.0000	.82400	30.000	.8000-03	.6000-03	.9000-03	.2661-04	.2204-04	.2968-04	.1700-01	.2320	539.8
43	3.0000	.20000	31.000	.3150-01	.2600-01	.3520-01	.1077-02	.8896-03	.1203-02	.6620	7.012	548.4
43	3.0000	.22500	32.000	.2650-01	.2190-01	.2960-01	.7118-03	.5892-03	.7946-03	.5600	6.262	545.6
43	3.0000	.27500	33.000	.2080-01	.1720-01	.2320-01	.5505-03	.4559-03	.6143-03	.4420	4.953	542.6
43	3.0000	.34.000	34.000	.1610-01	.1330-01	.1800-01	.4643-03	.3846-03	.5180-03	.2900	3.592	539.9
43	3.0000	.30000	35.000	.1360-01	.1120-01	.1510-01	.5764-03	.5602-03	.7546-03	.4220	4.953	540.4
43	3.0000	.32500	36.000	.1980-01	.1640-01	.2210-01	.1042-02	.8625-03	.1163-02	.6470	7.516	542.5
43	3.0000	.35000	37.000	.3050-01	.2520-01	.3400-01	.9943-03	.8229-03	.1110-02	.6170	7.244	542.8
43	3.0000	.37500	38.000	.2910-01	.2410-01	.3240-01	.6237-03	.5164-03	.6959-03	.3880	4.586	540.9
43	3.0000	.40000	39.000	.1820-01	.1510-01	.2030-01	.9554-03	.7906-03	.1167-02	.5930	7.024	543.5
43	3.0000	.42500	40.000	.2790-01	.2310-01	.3120-01	.6906-03	.5718-03	.7707-03	.4300	4.916	541.4
43	3.0000	.45000	41.000	.2020-01	.1670-01	.2250-01	.5776-03	.4783-03	.6446-03	.3590	4.010	541.4
43	3.0000	.47500	42.000	.1630-01	.1400-01	.1880-01	.4748-03	.3931-03	.5298-03	.2960	3.298	541.1
43	3.0000	.50000	43.000	.3390-01	.2850-01	.3700-01	.3085-03	.2555-03	.3441-03	.1920	2.261	539.8
43	3.0000	.52500	44.000	.9000-02	.7500-02	.1010-01	.2717-03	.2251-03	.3031-03	.1700	1.893	539.7
43	3.0000	.55000	45.000	.7900-02	.6600-02	.8900-02	.1824-03	.1511-03	.2034-03	.1140	1.242	539.7
43	3.0000	.60000	46.000	.5300-02	.4400-02	.5900-02	.1251-03	.1037-03	.1395-03	.7800-01	.8320	538.4
43	3.0000	.65000	47.000	.3700-02	.3000-02	.4100-02	.4305-04	.3568-04	.4800-04	.2700-01	.2980	537.5
43	3.0000	.70000	48.000	.1300-02	.1000-02	.1400-02	.3750-04	.3116-04	.4192-04	.2400-01	.2570	537.4
43	3.0000	.75000	49.000	.1100-02	.9000-03	.1200-02	.4578-04	.3794-04	.5106-04	.2900-01	.3080	538.1
43	3.0000	.80000	50.000	.1300-02	.1100-02	.1500-02	.4115-04	.3408-04	.4591-04	.1300-01	.1660	540.3
43	3.0000	.85000	51.000	.6000-03	.5000-03	.7000-03	.2143-04	.1775-04	.2391-04	.2600-01	.3180	541.6
43	3.0000	.87500	52.000	.1200-02	.1000-02	.1400-02	.3691-04	.3222-04	.4342-04	.2400-01	.3380	540.8
43	3.0000	.90000	53.000	.1100-02	.9000-03	.1300-02	.4395-04	.3632-04	.4894-04	.2700-01	.3590	540.8
43	3.0000	.92500	54.000	.1300-02	.1100-02	.1400-02	.4153-04	.3439-04	.4633-04	.2600-01	.2630	540.5
43	3.0000	.95000	55.000	.1200-02	.1000-02	.1400-02	.1150-02	.9497-03	.1286-02	.7050	8.022	551.0
43	4.0000	.20000	71.000	.3360-01	.2780-01	.3760-01	.8974-03	.7418-03	.1003-02	.5530	6.475	547.3
43	4.0000	.22500	72.000	.2620-01	.2170-01	.2930-01	.7242-03	.5981-03	.8087-03	.4480	5.253	544.8
43	4.0000	.25000	73.000	.2120-01	.1750-01	.2360-01	.7947-03	.6574-03	.8873-03	.4920	6.088	544.6
43	4.0000	.27500	74.000	.2320-01	.1920-01	.2590-01	.7908-03	.6544-03	.8818-03	.4910	6.432	543.3
43	4.0000	.30000	56.000	.2310-01	.1910-01	.2590-01	.1054-02	.8719-03	.1177-02	.6530	8.554	544.3
43	4.0000	.32500	57.000	.3090-01	.2550-01	.3440-01	.7123-03	.5899-03	.7956-03	.4430	5.803	542.8
43	4.0000	.35000	58.000	.2090-01	.1720-01	.2330-01	.6530-03	.5406-03	.7287-03	.4060	5.327	541.8
43	4.0000	.37500	59.000	.1910-01	.1580-01	.2130-01	.4631-03	.3835-03	.5168-03	.2890	3.785	541.1
43	4.0000	.40000	60.000	.1350-01	.1120-01	.1510-01	.4631-03	.3835-03	.5168-03	.2890	3.785	541.1
43	4.0000	.42500	61.000	.8000-02	.6600-02	.8900-02	.2742-03	.2272-03	.3060-03	.1710	2.247	539.9

(RV8001)

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-B8A) B82C12F10H16H127E52V8R19

DATE 07 OCT 75

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H(9T) BTU/ R FT2SEC	H(TO) BTU/ R FT2SEC	H(TAH) BTU/ R FT2SEC	ODOT BTU/ --2SEC	DTWOT DEG. R /SEC	TM DEG. R
43	4.0000	.45000	62.000	.6300-.02	.5200-.02	.7000-.02	.2148-.03	.1779-.03	.2396-.03	.1340	1.741	539.5
43	4.0000	.47500	63.000	.5200-.02	.4300-.02	.5800-.02	.1793-.03	.1485-.03	.2896-.03	.1120	1.429	539.0
43	4.0000	.50000	64.000	.3800-.02	.3100-.02	.4200-.02	.1297-.03	.1074-.03	.1446-.03	.8100-.01	1.006	538.7
43	4.0000	.52500	65.000	.3600-.02	.3000-.02	.4000-.02	.1219-.03	.1010-.03	.1359-.03	.7600-.01	.9450	539.0
43	4.0000	.55000	66.000	.3200-.02	.2500-.02	.3500-.02	.1086-.03	.9002-.04	.1212-.03	.6800-.01	.7980	538.7
43	4.0000	.60000	67.000	.1700-.02	.1400-.02	.1900-.02	.5741-.04	.4758-.04	.6402-.04	.3600-.01	.4050	537.9
43	4.0000	.65000	68.000	.8000-.03	.7000-.03	.9000-.03	.2724-.04	.2257-.04	.3037-.04	.1700-.01	.2010	537.7
43	4.0000	.70000	69.000	.8000-.03	.7000-.03	.9000-.03	.2765-.04	.2292-.04	.3084-.04	.1700-.01	.1930	538.4
43	4.0000	.75000	70.000	.1000-.02	.8000-.03	.1100-.02	.3300-.04	.2735-.04	.3680-.04	.2100-.01	.2310	537.8
43	4.0000	.80000	71.000	.7000-.03	.6000-.03	.8000-.03	.2383-.04	.1975-.04	.2658-.04	.1500-.01	.1800	538.9
43	4.0000	.87500	72.000	.7000-.03	.6000-.03	.8000-.03	.2519-.04	.2087-.04	.2809-.04	.1600-.01	.2070	538.8
43	4.0000	.90000	73.000	.9000-.03	.8000-.03	.1000-.02	.3132-.04	.2595-.04	.3494-.04	.2000-.01	.2540	539.3
43	4.0000	.92500	74.000	.5000-.03	.4000-.03	.5000-.03	.1587-.04	.1315-.04	.1771-.04	.1000-.01	.1230	539.8
43	4.0000	.95000	80.000	.6000-.03	.5000-.03	.7000-.03	.2046-.04	.1695-.04	.2282-.04	.1300-.01	.1500	540.0

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 67

04-74 (AEDC V41B-B8A) B62C12F10H16H12E52V8R19

(RVB001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PC PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
44	7.980	39.86	419.4	1292.	-179.9	.0000	94.10	.4400-01	1.946	3792.	.3894-04	.7573-07

RUN NUMBER	RN/L	HREF BTU/ R FT2SEC	STN NO R- .0175
44	1.950	.3422-01	.2899-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(1910) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(14H) BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TM DEG. R
44	1.0000	.27500	1.0000	.1480-01	.1230-01	.1650-01	.5073-03	.4199-03	.5663-03	.3150	3.264	542.4
44	1.0000	.30000	2.0000	.1290-01	.1060-01	.1430-01	.4372-03	.3619-03	.4880-03	.2710	2.882	542.1
44	1.0000	.32500	3.0000	.1090-01	.9000-02	.1220-01	.3734-03	.3091-03	.4167-03	.2320	2.385	541.5
44	1.0000	.35000	4.0000	.1760-01	.1460-01	.1950-01	.6024-03	.4986-03	.6724-03	.3740	3.879	542.0
44	1.0000	.37500	5.0000	.1780-01	.1470-01	.1980-01	.6084-03	.5034-03	.6792-03	.3770	3.953	543.2
44	1.0000	.40000	6.0000	.1790-01	.1480-01	.2000-01	.6135-03	.5078-03	.6849-03	.3800	3.908	542.8
44	1.0000	.42500	7.0000	.1770-01	.1460-01	.1980-01	.6057-03	.5012-03	.6762-03	.3750	3.892	543.1
44	1.0000	.45000	8.0000	.2860-01	.2370-01	.3200-01	.9921-03	.8109-03	.1094-02	.6070	6.201	543.8
44	1.0000	.47500	9.0000	.1900-01	.1570-01	.2120-01	.6495-03	.5374-03	.7251-03	.4020	4.095	543.3
44	1.0000	.50000	10.0000	.2430-01	.2010-01	.2720-01	.8323-03	.6887-03	.9892-03	.5160	5.223	543.3
44	1.0000	.52500	11.0000	.2760-01	.2260-01	.3080-01	.9437-03	.7807-03	.1054-02	.5840	5.913	544.1
44	1.0000	.55000	12.0000	.2280-01	.1890-01	.2540-01	.7792-03	.6448-03	.8999-03	.4830	4.846	543.3
44	1.0000	.60000	13.0000	.1860-01	.1540-01	.2070-01	.6351-03	.5254-03	.7091-03	.3930	3.981	543.9
44	1.0000	.65000	14.0000	.9009-02	.7420-02	.1000-01	.3071-03	.2542-03	.3428-03	.1910	1.933	542.0
44	1.0000	.70000	15.0000	.1500-02	.1200-02	.1700-02	.5067-04	.4197-04	.5653-04	.3200-01	.3090	540.0
44	1.0000	.75000	16.0000	.3000-02	.2400-02	.3300-02	.1011-03	.8369-04	.1128-03	.5300-01	.5380	540.2
44	1.0000	.80000	17.0000	.2400-02	.2000-02	.2600-02	.9100-04	.5708-04	.9039-04	.5000-01	.4890	540.6
44	1.0000	.85000	18.0000	.1510-01	.1250-01	.1680-01	.5154-03	.4265-03	.5753-03	.3200	3.753	542.4
44	2.0000	.28500	19.0000	.1950-01	.1520-01	.2190-01	.6716-03	.5958-03	.7497-03	.4170	4.913	542.6
44	2.0000	.33700	20.0000	.1970-01	.1630-01	.2200-01	.6739-03	.5977-03	.7523-03	.4180	4.929	542.7
44	2.0000	.39000	21.0000	.3650-01	.2700-01	.3650-01	.1117-02	.9241-03	.1248-02	.5910	8.093	544.8
44	2.0000	.42600	22.0000	.2710-01	.2240-01	.3020-01	.9259-03	.7650-03	.1034-02	.5730	6.365	543.9

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 88

OH-74 (AEDC V41B-88A) 862C12F10M16W127E52V8R19

(RY800)

RUN NUMBER	TRATE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9T) FT2SEC	H(10) BTU/ R	H(11) FT2SEC	H(12) BTU/ R	QOOT BTU/	DTWDT DEG. R	TH DEG. R
44	2.0000	.53000	23.000	.1790-01	.1480-01	.2000-01	.6124-03	.5068-03	.6837-03	.4439-03	.3800	4.232	542.8
44	2.0000	.56700	24.000	.1160-01	.9600-02	.1300-01	.3978-03	.3293-03	.4439-03	.2470	2.689	541.6	541.6
44	2.0000	.62000	25.000	.6700-02	.5500-02	.7500-02	.2287-03	.1894-03	.2552-03	.1420	1.549	540.6	540.6
44	2.0000	.67000	26.000	.2500-02	.2100-02	.2800-02	.8489-04	.7030-04	.9471-04	.3900-01	.9780	539.9	539.9
44	2.0000	.70500	27.000	.1800-02	.1500-02	.2000-02	.8282-04	.5804-04	.7008-04	.3900-01	.4230	538.8	538.8
44	2.0000	.75000	28.000	.2700-02	.2300-02	.3000-02	.9318-04	.7719-04	.1039-03	.5800-01	.5480	539.3	539.3
44	2.0000	.82400	30.000	.9000-03	.7000-03	.1000-02	.3060-04	.2534-04	.3414-04	.1900-01	.2660	539.9	539.9
44	3.0000	.20000	31.000	.3250-01	.2690-01	.3640-01	.1113-02	.9198-03	.1244-02	.8830	7.229	546.7	546.7
44	3.0000	.22500	32.000	.2630-01	.2170-01	.2940-01	.8996-03	.7436-03	.1005-02	.5540	6.196	544.1	544.1
44	3.0000	.25000	33.000	.2010-01	.1660-01	.2240-01	.6871-03	.5684-03	.7672-03	.4250	4.759	542.6	542.6
44	3.0000	.27500	34.000	.1530-01	.1270-01	.1710-01	.5252-03	.4347-03	.5863-03	.3260	3.904	541.5	541.5
44	3.0000	.30000	35.000	.1610-01	.1330-01	.1790-01	.5502-03	.4555-03	.6141-03	.3420	4.236	543.3	543.3
44	3.0000	.32500	36.000	.2730-01	.2260-01	.3050-01	.9349-03	.7735-03	.1044-02	.5790	6.794	542.5	542.5
44	3.0000	.35000	37.000	.2800-01	.2310-01	.3120-01	.9572-03	.7919-03	.1069-02	.5930	6.879	542.9	542.9
44	3.0000	.37500	38.000	.2110-01	.1740-01	.2350-01	.7212-03	.5969-03	.8050-03	.4470	5.249	542.0	542.0
44	3.0000	.40000	39.000	.2530-01	.2090-01	.2620-01	.8651-03	.7159-03	.9657-03	.5360	6.325	542.9	542.9
44	3.0000	.42500	40.000	.2470-01	.2040-01	.2760-01	.8446-03	.6988-03	.9429-03	.5230	6.200	543.5	543.5
44	3.0000	.45000	41.000	.1940-01	.1610-01	.2160-01	.6638-03	.5494-03	.7409-03	.4120	4.712	542.0	542.0
44	3.0000	.47500	42.000	.1630-01	.1350-01	.1820-01	.5583-03	.4621-03	.6231-03	.3470	3.865	541.1	541.1
44	3.0000	.50000	43.000	.1110-01	.9200-02	.240-01	.3802-03	.3147-03	.4242-03	.2360	2.636	540.3	540.3
44	3.0000	.52500	44.000	.7200-02	.6000-02	.8100-02	.2480-03	.2053-03	.2767-03	.1540	1.813	539.9	539.9
44	3.0000	.55000	45.000	.6500-02	.5300-02	.7200-02	.2210-03	.1830-03	.2466-03	.1380	1.537	539.4	539.4
44	3.0000	.60000	46.000	.4200-02	.3500-02	.4700-02	.1451-03	.1202-03	.1619-03	.9000-01	.9860	538.2	538.2
44	3.0000	.65000	47.000	.1600-02	.1300-02	.1800-02	.5450-04	.4516-04	.6079-04	.3400-01	.3620	538.2	538.2
44	3.0000	.70000	48.000	.1800-02	.1500-02	.2000-02	.6071-04	.5031-04	.6772-04	.3600-01	.4190	538.4	538.4
44	3.0000	.75000	49.000	.2400-02	.2000-02	.2700-02	.8268-04	.6851-04	.9223-04	.5200-01	.5630	538.8	538.8
44	3.0000	.80000	50.000	.2300-02	.1900-02	.2600-02	.7848-04	.6501-04	.8754-04	.4900-01	.5260	538.8	538.8
44	3.0000	.85000	51.000	.1100-02	.9000-03	.1200-02	.3622-04	.3000-04	.4042-04	.2300-01	.2800	540.5	540.5
44	3.0000	.87500	52.000	.1500-02	.1200-02	.1600-02	.4963-04	.4110-04	.5538-04	.2100-01	.3830	540.7	540.7
44	3.0000	.90000	53.000	.2100-02	.1700-02	.2300-02	.7078-04	.5860-04	.7899-04	.4400-01	.6130	541.3	541.3
44	3.0000	.92500	54.000	.4000-02	.3300-02	.4400-02	.1354-03	.1121-03	.1511-03	.8400-01	1.104	541.4	541.4
44	3.0000	.95000	55.000	.5400-02	.4500-02	.6100-02	.1865-03	.1544-03	.2081-03	.1160	1.175	541.3	541.3
44	4.0000	.22500	72.000	.2590-01	.2140-01	.2890-01	.8854-03	.7315-03	.9894-03	.5440	6.364	548.4	548.4
44	4.0000	.25000	73.000	.2330-01	.1930-01	.2600-01	.7973-03	.6591-03	.8907-03	.4910	5.753	546.6	546.6
44	4.0000	.27500	74.000	.2610-01	.2160-01	.2910-01	.8922-03	.7376-03	.9966-03	.5500	6.799	546.3	546.3
44	4.0000	.30000	75.000	.2820-01	.2330-01	.3140-01	.9535-03	.7957-03	.1076-02	.5950	7.789	545.5	545.5
44	4.0000	.32500	76.000	.2490-01	.2060-01	.2780-01	.8528-03	.7053-03	.9523-03	.5270	6.905	544.7	544.7
44	4.0000	.35000	77.000	.2100-01	.1730-01	.2340-01	.7174-03	.5935-03	.8010-03	.4440	5.821	543.7	543.7
44	4.0000	.37500	78.000	.1930-01	.1650-01	.2220-01	.6812-03	.5638-03	.7605-03	.4220	5.538	542.8	542.8
44	4.0000	.40000	79.000	.1930-01	.1650-01	.2220-01	.6812-03	.5638-03	.7605-03	.4220	5.538	542.8	542.8
44	4.0000	.42500	80.000	.1110-01	.9200-02	.1240-01	.3797-03	.3144-03	.4637-03	.2360	3.097	541.2	541.2
44	4.0000	.45000	81.000	.7300-02	.6100-02	.8200-02	.2509-03	.2078-03	.2800-03	.1560	2.050	540.5	540.5

DATE 07 OCT 75

OH-7A (AEDC V41B-B8A) HEATING DATA ON ORBITTER FUSELAGE PORT SIDE

PAGE 70

OH-7A (AEDC V41B-B8A) B62C12F10M16W127E32V8R19

(RV8001)

ORBITTER FUSELAGE

PARAMETRIC DATA

BE'A = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
45	7.980	43.87	418.9	1290.	-179.9	.0000	93.90	.4400-01	1.944	3789.	.3896-04	.7561-07

RUN NUMBER	RN/L X10 6 /FT	STN NO R=
45	1.953	.2898-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9T0) FT/SEC	H(T0) BTU/ R	H(TAH) FT/SEC	QDOT BTU/ R	DTWOT DEG. R	TM DEG. R
45	1.0000	.27500	1.0000	.1460-01	.1210-01	.1630-01	.4992-03	.4131-03	.5572-03	.3090	3.206	541.8
45	1.0000	30000	2.0000	.1290-01	.1070-01	.1440-01	.4422-03	.3660-03	.4935-03	.2740	2.910	541.4
45	1.0000	32500	3.0000	.1320-01	.1100-01	.1480-01	.4529-03	.3749-03	.5055-03	.2810	2.886	541.1
45	1.0000	35000	4.0000	.2060-01	.1700-01	.2300-01	.7042-03	.5828-03	.7861-03	.4360	4.525	541.6
45	1.0000	37500	5.0000	.1750-01	.1450-01	.1950-01	.5975-03	.4943-03	.6670-03	.3690	3.885	542.6
45	1.0000	40000	6.0000	.1720-01	.1420-01	.1920-01	.5876-03	.4863-03	.6560-03	.3640	3.739	541.3
45	1.0000	42500	7.0000	.2290-01	.1890-01	.2550-01	.7824-03	.6473-03	.8736-03	.4940	5.014	542.9
45	1.0000	45000	8.0000	.2460-01	.2040-01	.2750-01	.8421-03	.6967-03	.9402-03	.5210	5.325	542.7
45	1.0000	47500	9.0000	.2030-01	.1680-01	.2270-01	.6952-03	.5752-03	.7761-03	.4300	4.375	542.6
45	1.0000	50000	10.000	.2820-01	.2340-01	.3150-01	.9654-03	.7986-03	.1078-02	.5960	6.04	543.3
45	1.0000	52500	11.000	.2710-01	.2240-01	.3020-01	.9257-03	.7658-03	.1034-02	.5720	5.793	543.2
45	1.0000	55000	12.000	.2110-01	.1750-01	.2360-01	.7223-03	.5977-03	.8063-03	.4470	4.491	542.0
45	1.0000	60000	13.000	.1390-01	.1150-01	.1550-01	.4739-03	.3922-03	.5292-03	.2930	2.974	542.0
45	1.0000	65000	14.000	.4000-02	.3300-02	.4400-02	.1354-03	.1121-03	.1512-03	.8400-01	.8530	540.5
45	1.0000	70000	15.000	.2700-02	.2300-02	.3100-02	.9395-04	.7780-04	.1048-03	.5800-01	.5720	539.6
45	1.0000	75000	16.000	.5200-02	.4300-02	.5800-02	.1788-03	.1490-03	.1995-03	.1110	1.126	540.1
45	1.0000	80000	17.000	.2200-02	.1900-02	.2500-02	.7652-04	.6335-04	.8531-03	.4700-01	.4610	540.2
45	2.0000	28500	18.000	.1530-01	.1270-01	.1710-01	.5242-03	.4339-03	.5951-03	.3250	3.815	540.2
45	2.0000	33700	19.000	.2510-01	.2130-01	.2870-01	.8803-03	.7284-03	.9828-03	.5440	6.423	542.5
45	2.0000	39000	20.000	.2240-01	.1850-01	.2500-01	.7648-03	.6330-03	.8537-03	.4740	5.591	541.6
45	2.0000	42600	21.000	.3150-01	.2610-01	.3520-01	.1079-02	.8921-03	.1205-02	.6650	7.801	544.2
45	2.0000	47800	22.000	.2720-01	.2250-01	.3040-01	.9297-03	.7693-03	.1038-02	.5750	6.410	542.5

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

RUN NUMBER	TRA.E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H/(GTO) BTU/ R FT2SEC	H/(TO) BTU/ R FT2SEC	H/(TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DT4OT DEG. R /SEC	TM DEG.
45	2.0000	53000	23.000	.1310-01	.1080-01	.1460-01	.4465-03	.3695-03	.4984-03	.2770	3.086	541.4
45	2.0000	56700	24.000	.8900-02	.7300-02	.9900-02	.3028-03	.2507-03	.3378-03	.1880	2.048	539.9
45	2.0000	62000	25.000	.4300-02	.3500-02	.4800-02	.1462-03	.1210-03	.1631-03	.9100-01	.9900	539.2
45	2.0000	67000	26.000	.1400-02	.1200-02	.1600-02	.4932-04	.4087-04	.5501-04	.3100-01	.3350	537.4
45	2.0000	70500	27.000	.2900-02	.2400-02	.3200-02	.9978-04	.8267-04	.1113-03	.6200-01	.6720	537.6
45	2.0000	75000	28.000	.3800-02	.3200-02	.4300-02	.1307-03	.1082-03	.1458-03	.8100-01	.8960	539.2
45	2.0000	80000	29.000	.2700-02	.2200-02	.3000-02	.9285-04	.7690-04	.1036-03	.5800-01	.6390	539.8
45	2.0000	82400	30.000	.1000-02	.8000-03	.1100-02	.3358-04	.2781-04	.3747-04	.2910-01	.2910	539.5
45	3.0000	20000	31.000	.3210-01	.2650-01	.3590-01	.1097-02	.9059-03	.1226-02	.6710	7.106	548.8
45	3.0000	22500	32.000	.2600-01	.2150-01	.2910-01	.8930-03	.7357-03	.9943-03	.5470	6.121	546.0
45	3.0000	25000	33.000	.2060-01	.1710-01	.2300-01	.7053-03	.5835-03	.7875-03	.4360	4.881	543.1
45	3.0000	27500	34.000	.1620-01	.1340-01	.1800-01	.5527-03	.4575-03	.6169-03	.3430	4.110	541.1
45	3.0000	30000	35.000	.1910-01	.1590-01	.2140-01	.6548-03	.5421-03	.7308-03	.4060	5.036	540.6
45	3.0000	32500	36.000	.2850-01	.2350-01	.3180-01	.9746-03	.8065-03	.1088-02	.6030	7.081	542.0
45	3.0000	35000	37.000	.2440-01	.2000-01	.2730-01	.8351-03	.6912-03	.9322-03	.5170	6.012	541.3
45	3.0000	37500	38.000	.2420-01	.2000-01	.2730-01	.8259-03	.6836-03	.9219-03	.5120	6.009	541.3
45	3.0000	40000	39.000	.2550-01	.2110-01	.2850-01	.8718-03	.7216-03	.9731-03	.5420	6.378	541.2
45	3.0000	42500	40.000	.2210-01	.1830-01	.2420-01	.7549-03	.6248-03	.8426-03	.4680	5.550	541.4
45	3.0000	45000	41.000	.1870-01	.1540-01	.2080-01	.6390-03	.5283-03	.7120-03	.3960	4.533	540.3
45	3.0000	47500	42.000	.1390-01	.1150-01	.1550-01	.4747-03	.3931-03	.5297-03	.2950	3.290	540.0
45	3.0000	50000	43.000	.9300-02	.7730-02	.1040-01	.3186-03	.2638-03	.3554-03	.1980	2.213	539.0
45	3.0000	52500	44.000	.6200-02	.5150-02	.6900-02	.2103-03	.1742-03	.2346-03	.1310	1.539	538.5
45	3.0000	55000	45.000	.5000-02	.4200-02	.5600-02	.1718-03	.1423-03	.1917-03	.1070	1.196	538.2
45	3.0000	57500	46.000	.6000-02	.2700-02	.2700-02	.8409-04	.5957-04	.9380-04	.5200-01	.5710	537.7
45	3.0000	60000	47.000	.1600-02	.1300-02	.1800-02	.5563-04	.4610-04	.6205-04	.5500-01	.3690	537.3
45	3.0000	70000	48.000	.2000-02	.1800-02	.2500-02	.7619-04	.6313-04	.8498-04	.4600-01	.5260	537.4
45	3.0000	75000	49.000	.3000-02	.2500-02	.3400-02	.1037-03	.9588-04	.1558-04	.6500-01	.7040	537.7
45	3.0000	80000	50.000	.1900-02	.1600-02	.2100-02	.6564-04	.5438-04	.7322-04	.4100-01	.4390	538.0
45	3.0000	85000	51.000	.1100-02	.9000-03	.1200-02	.3633-04	.3008-04	.4054-04	.2300-01	.2900	540.0
45	3.0000	87500	52.000	.1900-02	.1500-02	.2000-02	.6121-04	.5067-04	.6832-04	.7900-01	.4710	540.8
45	3.0000	90000	53.000	.2800-02	.2300-02	.3100-02	.9577-04	.7926-04	.1063-03	.5930-01	.9370	541.5
45	3.0000	92500	54.000	.3000-02	.3100-02	.4200-02	.1282-03	.1051-03	.1431-03	.7900-01	1.041	541.7
45	3.0000	95000	55.000	.4500-02	.3700-02	.5000-02	.1529-03	.1266-03	.1727-03	.9500-01	.9600	541.8
45	4.0000	20000	56.000	.7200-01	.2500-01	.3580-01	.1035-03	.9037-03	.1255-02	.6670	7.592	551.9
45	4.0000	22500	57.000	.2700-01	.2300-01	.3120-01	.9532-03	.7880-03	.1066-02	.5950	6.840	546.1
45	4.0000	25000	58.000	.2500-01	.2120-01	.2850-01	.8769-03	.7247-03	.9795-03	.5300	6.314	546.2
45	4.0000	27500	59.000	.2500-01	.2200-01	.2990-01	.9140-03	.7556-03	.1021-02	.5620	6.953	546.9
45	4.0000	30000	60.000	.2900-01	.2300-01	.3190-01	.9748-03	.8059-03	.1039-02	.5000	7.860	546.3
45	4.0000	32500	61.000	.2400-01	.1900-01	.2690-01	.8211-03	.6792-03	.1019-02	.5070	5.647	543.5
45	4.0000	35000	62.000	.2270-01	.1870-01	.2530-01	.7746-03	.6400-03	.8648-03	.4790	5.279	542.8
45	4.0000	37500	63.000	.1750-01	.1400-01	.1960-01	.6000-03	.4957-03	.6597-03	.3720	4.983	541.0
45	4.0000	40000	64.000	.9700-02	.8100-02	.1190-01	.3325-03	.2753-03	.3710-03	.2070	2.714	539.5
45	4.0000	42500	65.000	.5500-02	.5000-02	.7400-02	.2255-03	.1969-03	.2516-03	.1100	1.843	539.0

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75		OH-74 (AEDC V41B-B8A) HEATING DATA ON CR811TER FUSELAGE PORT SIDE										PAGE 72
RUN NUMBER		(RVB0011)										
		OH-74 (AEDC V41B-B8A) B62C12F10M/6M127E52V8R19										
		H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H(9T) BTU/ R FT2SEC	H(10T) BTU/ R FT2SEC	H(11T) BTU/ R FT2SEC	H(12T) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTLOT DEG. R /SEC	TH DEG. R	
45	4.0000	.4800-02	.4000-02	.5300-02	.1634-03	.1353-03	.1823-03	.1020	.1020	1.321	538.4	
45	4.0000	.3700-02	.3100-02	.4100-02	.1268-03	.1050-03	.1415-03	.7990-01	.7990-01	1.008	538.5	
45	4.0000	.2700-02	.2200-02	.3000-02	.9151-04	.7581-04	.1021-03	.5700-01	.5700-01	.7080	537.8	
45	4.0000	.1700-02	.1400-02	.1900-02	.5870-04	.4863-04	.6548-04	.3700-01	.3700-01	.4540	538.0	
45	4.0000	.9000-03	.8000-03	.1100-02	.3235-04	.2680-04	.3608-04	.2000-01	.2000-01	.2370	537.5	
45	4.0000	.6000-03	.5000-03	.7000-03	.2113-04	.1751-04	.2357-04	.1325-01	.1325-01	.1490	537.1	
45	4.0000	.1300-02	.1100-02	.1500-02	.4525-04	.3750-04	.5048-04	.2800-01	.2800-01	.3320	537.6	
45	4.0000	.1700-02	.1400-02	.1900-02	.5916-04	.4901-04	.6600-04	.3700-01	.3700-01	.4110	538.6	
45	4.0000	.2500-02	.2100-02	.2800-02	.8717-04	.7221-04	.9724-04	.5400-01	.5400-01	.6060	538.3	
45	4.0000	.1100-02	.5300-03	.1200-02	.3696-04	.3061-04	.4124-04	.2300-01	.2300-01	.2770	539.4	
45	4.0000	.1800-02	.1500-02	.2000-02	.6134-04	.5081-04	.6843-04	.3800-01	.3800-01	.4500	538.3	
45	4.0000	.1200-02	.1000-02	.1300-02	.4056-04	.3359-04	.4526-04	.2500-01	.2500-01	.3310	539.6	
45	4.0000	.2700-02	.2200-02	.3000-02	.9132-04	.7553-04	.1019-03	.5700-01	.5700-01	.7350	540.8	
45	4.0000	.5800-02	.4800-02	.6500-02	.1995-03	.1651-03	.2226-03	.1240	.1240	1.532	541.2	
45	4.0000	.5600-02	.4600-02	.6300-02	.1920-03	.1589-03	.2144-03	.1190	.1190	1.395	542.2	

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITTER FUSELAGE PORT SIDE

PAGE 73

ORBITTER FUSELAGE

OH-74 (AEDC V41B-B8A) 862C12F10M16M127E52V8R19

(RV3001)

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
99	7.980	19.77	545.6	1315.	180.0	.0000	95.70	.5700-01	2.532	3826.	.4978-04	.7707-07

RUN NUMBER	RN/L X10 5 /FT	HREF BTU/ R FT2SEC	STN NO R=
99	2.471	.3916-01	.2569-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAW	H(9TO) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAW) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTWDT DEG. R /SEC	TM DEG. R
99	1.0000	.27500	1.0000	.1290-01	.1060-01	.1440-01	.5033-03	.4161-03	.5622-03	.3160	3.251	555.2
99	1.0000	.30000	2.0000	.1110-01	.9200-02	.1240-01	.4345-03	.3592-03	.4853-03	.2730	2.877	555.7
99	1.0000	.32500	3.0000	.8700-02	.7200-02	.9700-02	.3417-03	.2826-03	.3816-03	.2150	2.193	554.9
99	1.0000	.35000	4.0000	.9100-02	.7500-02	.1010-01	.3551-03	.2937-03	.3966-03	.2230	2.300	555.0
99	1.0000	.37500	5.0000	.9000-02	.7400-02	.1010-01	.3524-03	.2915-03	.3936-03	.2220	2.316	554.8
99	1.0000	.40000	6.0000	.1090-01	.9000-02	.1220-01	.4266-03	.3528-03	.4784-03	.2880	2.740	554.5
99	1.0000	.42500	7.0000	.1000-01	.8300-02	.1120-01	.3922-03	.3243-03	.4380-03	.2470	2.541	554.8
99	1.0000	.45000	8.0000	.1260-01	.1040-01	.1410-01	.4932-03	.4079-03	.5508-03	.3100	3.150	555.0
99	1.0000	.47500	9.0000	.1810-01	.1500-01	.2020-01	.7090-03	.5863-03	.7920-03	.4450	4.403	555.6
99	1.0000	.50000	10.000	.1590-01	.1310-01	.1770-01	.6219-03	.5143-03	.6946-03	.3910	3.938	554.9
99	1.0000	.52500	11.000	.1610-01	.1330-01	.1800-01	.6295-03	.5206-03	.7030-03	.3960	3.995	554.9
99	1.0000	.55000	12.000	.1830-01	.1510-01	.2040-01	.7165-03	.5926-03	.8002-03	.4500	4.496	554.8
99	1.0000	.60000	13.000	.2320-01	.1920-01	.2590-01	.9090-03	.7514-03	.1015-02	.5700	5.137	556.3
99	1.0000	.65000	14.000	.3200-01	.2640-01	.3580-01	.1253-02	.1035-02	.1400-02	.7840	7.886	557.7
99	1.0000	.70000	15.000	.5160-01	.4260-01	.5770-01	.2020-02	.1669-02	.2259-02	1.258	12.19	560.6
99	1.0000	.75000	16.000	.6240-01	.5150-01	.6980-01	.2443-02	.2016-02	.2733-02	1.516	15.21	562.9
99	1.0000	.80000	17.000	.3210-01	.3590-01	.3590-01	.1256-02	.1037-02	.1404-02	.7820	7.515	560.5
99	1.0000	.85000	18.000	.1240-01	.1020-01	.1380-01	.4849-03	.4007-03	.54.7-03	.3040	3.537	557.2
99	2.0000	.28500	19.000	.1090-01	.9000-02	.1220-01	.4274-03	.3534-03	.4774-03	.2690	3.142	556.0
99	2.0000	.33700	20.000	.1180-01	.9700-02	.1310-01	.4605-03	.3807-03	.5143-03	.2890	3.388	555.6
99	2.0000	.39000	21.000	.1840-01	.1520-01	.2050-01	.7189-03	.5942-03	.8032-03	.4500	5.246	557.0
99	2.0000	.42600	22.000	.2100-01	.1740-01	.2750-01	.9327-03	.5800-03	.9191-03	.5160	5.706	556.3

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 74

OH-74 (AEDC V418-B8A) B62C12F10M16M127E52VBR19

(RV8001)

RUN NUMBER	TRANS	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H(910) BTU/ R FT2SEC	H(101) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	OTDOT DEG. R /SEC	TH DEG. R
99	2.0000	.53000	23.000	.3080-01	.2540-01	.3440-01	.1204-02	.9952-03	.1346-02	.7530	8.331	558.1
99	2.0000	.56700	24.000	.3740-01	.3090-01	.4180-01	.1463-02	.1203-02	.1635-02	.9130	9.845	55.4
99	2.0000	.62000	25.000	.7000-01	.5770-01	.7830-01	.2741-02	.2261-02	.3067-02	1.696	18.24	567.7
99	2.0000	.67000	26.000	.4920-01	.4060-01	.5500-01	.1925-02	.1589-02	.2153-02	1.195	12.87	562.7
99	2.0000	.70500	27.000	.2870-01	.2370-01	.3200-01	.1122-02	.9269-03	.1254-02	.7010	7.494	558.4
99	2.0000	.75000	28.000	.1560-01	.1290-01	.1740-01	.6093-03	.5038-03	.6806-03	.3830	4.174	555.6
99	2.0000	.80000	29.000	.1460-01	.1210-01	.1630-01	.5711-03	.4722-03	.6379-03	.3590	3.932	555.6
99	2.0000	.82400	30.000	.4500-02	.3700-02	.5000-02	.1758-03	.1454-03	.1964-03	.1100	1.530	555.0
99	3.0000	.20000	31.000	.2810-01	.2320-01	.3140-01	.1099-02	.9067-03	.1229-02	.6830	7.176	562.1
99	3.0000	.22500	32.000	.2140-01	.1770-01	.2400-01	.8394-03	.6930-03	.9385-03	.5230	5.801	560.9
99	3.0000	.25000	33.000	.1650-01	.1360-01	.1840-01	.6442-03	.5322-03	.7200-03	.4020	4.472	558.8
99	3.0000	.27500	34.000	.1300-01	.1070-01	.1450-01	.5088-03	.4205-03	.5686-03	.3180	3.787	557.7
99	3.0000	.30000	35.000	.1140-01	.9400-02	.1270-01	.4455-03	.3682-03	.4977-03	.2790	3.433	556.8
99	3.0000	.32500	36.000	.1230-01	.1020-01	.1370-01	.4816-03	.3981-03	.5381-03	.3020	3.517	556.7
99	3.0000	.35000	37.000	.1280-01	.1060-01	.1430-01	.5022-03	.4151-03	.5610-03	.3150	3.630	556.6
99	3.0000	.37500	38.000	.1310-01	.1080-01	.1460-01	.5128-03	.4239-03	.5728-03	.3220	3.748	556.3
99	3.0000	.40000	39.000	.2150-01	.1780-01	.2400-01	.8415-03	.6955-03	.9402-03	.5270	6.173	557.0
99	3.0000	.42500	40.000	.2670-01	.2200-01	.2980-01	.1045-02	.8628-03	.1168-02	.6520	7.665	559.5
99	3.0000	.45000	41.000	.2760-01	.2280-01	.3090-01	.1081-02	.8931-03	.1208-02	.6760	7.866	558.3
99	3.0000	.47500	42.000	.3290-01	.2720-01	.3680-01	.1288-02	.1064-02	.1440-02	.8050	8.896	559.9
99	3.0000	.50000	43.000	.4410-01	.3640-01	.4930-01	.1727-02	.1426-02	.1930-02	1.075	11.87	560.9
99	3.0000	.52500	44.000	.6330-01	.5220-01	.7080-01	.2470-02	.2044-02	.2771-02	1.539	17.86	562.8
99	3.0000	.55000	45.000	.7750-01	.6390-01	.8680-01	.3036-02	.2502-02	.3358-02	1.872	20.61	566.9
99	3.0000	.60000	46.000	.4390-01	.3630-01	.4910-01	.1720-02	.1421-02	.1923-02	1.073	11.56	560.0
99	3.0000	.65000	47.000	.1990-01	.1640-01	.2220-01	.7780-03	.6431-03	.8691-03	.4880	5.144	556.4
99	3.0000	.70000	48.000	.1250-01	.1040-01	.1400-01	.4906-03	.4057-03	.5480-03	.3080	3.378	555.5
99	3.0000	.75000	49.000	.9500-02	.7900-02	.1060-01	.3719-03	.3075-03	.4154-03	.2340	2.525	555.3
99	3.0000	.80000	50.000	.7900-02	.6600-02	.8900-02	.3103-03	.2566-03	.3466-03	.1950	2.076	555.4
99	3.0000	.85000	51.000	.1130-01	.9300-02	.1260-01	.4423-03	.3556-03	.4942-03	.2770	3.409	556.8
99	3.0000	.87500	52.000	.1100-01	.9100-02	.2330-01	.8163-03	.6742-03	.9126-03	.5090	6.251	559.8
99	3.0000	.90000	53.000	.8400-02	.7000-02	.9400-02	.3300-03	.2727-03	.3688-03	.2060	2.854	558.0
99	3.0000	.92500	54.000	.1100-01	.9100-02	.1230-01	.4294-03	.3548-03	.4798-03	.2680	3.493	558.3
99	3.0000	.95000	55.000	.1300-01	.1080-01	.1460-01	.5104-03	.4217-03	.5703-03	.3190	3.210	558.1
99	4.0000	.20000	71.000	.3510-01	.2890-01	.3930-01	.1373-02	.1132-02	.1537-02	.8480	9.583	566.0
99	4.0000	.22500	72.000	.2770-01	.2290-01	.3090-01	.1083-02	.8931-03	.1211-02	.6710	7.786	564.0
99	4.0000	.25000	73.000	.2020-01	.1660-01	.2260-01	.7897-03	.6519-03	.8831-03	.4910	5.710	561.4
99	4.0000	.27500	74.000	.1630-01	.1350-01	.1820-01	.6385-03	.5273-03	.7138-03	.3980	4.887	560.1
99	4.0000	.30000	56.000	.1330-01	.1100-01	.1490-01	.5225-03	.4317-03	.5879-03	.3270	4.251	558.2
99	4.0000	.32500	57.000	.1570-01	.1300-01	.1760-01	.6162-03	.5091-03	.6886-03	.3850	5.011	558.4
99	4.0000	.35000	58.000	.2620-01	.2160-01	.2930-01	.1025-02	.8460-03	.1145-02	.6390	8.298	560.4
99	4.0000	.37500	59.000	.4170-01	.3410-01	.4620-01	.1618-02	.1335-02	.1809-02	1.005	13.05	562.1
99	4.0000	.40000	60.000	.5910-01	.4870-01	.6510-01	.2313-02	.1907-02	.2588-02	1.430	18.55	565.0
99	4.0000	.42500	61.000	.7460-01	.6140-01	.8350-01	.2920-02	.2405-02	.3270-02	1.794	23.21	569.2

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 75

(RVB001)

OH-74 (AEDC V41B-B8A) B6PC12F10M16H127E52V8R19

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H1GTO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	I1TAW BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
99	4.0000	.45000	62.000	.6910-01	.5650-01	.7730-01	.2705-02	.2228-02	.3028-02	1.663	21.28	568.5
99	4.0000	.47500	63.000	.4800-01	.3900-01	.5370-01	.1880-02	.1551-02	.2104-02	1.163	14.66	564.6
99	4.0000	.50000	64.000	.2670-01	.2210-01	.2990-01	.1046-02	.8644-03	.1170-02	.6540	8.029	558.9
99	4.0000	.52500	65.000	.1900-01	.1570-01	.2130-01	.7454-03	.6159-03	.8330-03	.4660	5.729	558.1
99	4.0000	.55000	66.000	.1410-01	.1160-01	.1570-01	.5511-03	.4555-03	.6157-03	.3450	4.024	556.8
99	4.0000	.60000	67.000	.1040-01	.8600-02	.1160-01	.4078-03	.3372-03	.4555-03	.2560	2.854	555.5
99	4.0000	.65000	68.000	.7700-02	.6400-02	.8600-02	.3031-03	.2506-03	.3386-03	.1900	2.220	555.4
99	4.0000	.70000	69.000	.6400-02	.5300-02	.7200-02	.2512-03	.2077-03	.2806-03	.1580	1.746	555.9
99	4.0000	.75000	70.000	.5600-02	.4600-02	.6200-02	.2190-03	.1811-03	.2446-03	.1380	1.527	555.6
99	4.0000	.80000	75.000	.2300-02	.1930-02	.2600-02	.9006-04	.7444-04	.1006-03	.5600-01	.6760	556.5
99	4.0000	.85000	76.000	.2700-02	.2300-02	.3100-02	.1076-03	.8895-04	.1202-03	.6800-01	.7950	555.4
99	4.0000	.87500	77.000	.5300-02	.4300-02	.5900-02	.2057-03	.1700-03	.2298-03	.1290	1.676	557.4
99	4.0000	.90000	78.000	.9100-02	.7600-02	.1020-01	.3579-03	.2956-03	.4000-03	.2240	2.874	558.4
99	4.0000	.92500	79.000	.6800-02	.5600-02	.7600-02	.2674-03	.2210-03	.2988-03	.1670	2.056	557.9
99	4.0000	.95000	80.000	.2600-02	.2200-02	.2900-02	.1028-03	.8492-04	.1148-03	.6400-01	.7490	557.4

DATE 07 OCT 75

PAGE 78

OH-74 (AEDC V418-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RV9001)

OH-74 (AEDC V418-BBA) B82C12F10M16H127E52VBR19

ORBITER FUSELAGE

PARAMETRIC DATA

RUDDER = .0000

ELEVON = .0000

MACH = 9.0000

BETA = .0000

YAW

DEG.

PHI

TO

DEG. R

PSIA

PO

STN NO

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
100	7.980	24.90	1295.	180.0	.0000	94.30	.5700-01	2.540	3797.	.5071-04	.7590-07

RUN NUMBER	RN/L	BTU/ R	FT2SEC	STN NO
100	2.537	.3912-01	.0175	.2541-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19TO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	ODOT BTU/ R FT2SEC	DTHOT DEG. R /SEC	TM DEG. R
100	1.0000	.27500	1.0000	.1320-01	.1090-01	.1480-01	.5169-03	.4273-03	.5776-03	.3190	3.297	548.5
100	1.0000	.30000	2.0000	.1160-01	.0960-02	.1290-01	.4526-03	.3741-03	.5055-03	.2790	2.959	547.9
100	1.0000	.32500	3.0000	.9800-02	.8100-02	.1100-01	.3839-03	.3175-03	.4289-03	.2370	2.433	547.2
100	1.0000	.35000	4.0000	.1130-01	.0940-02	.1270-01	.4431-03	.3654-03	.4950-03	.2740	2.833	547.5
100	1.0000	.37500	5.0000	.1070-01	.0800-02	.1190-01	.4181-03	.3456-03	.4670-03	.2580	2.711	547.4
100	1.0000	.40000	6.0000	.1140-01	.0950-02	.1280-01	.4478-03	.3703-03	.5002-03	.2770	2.839	547.0
100	1.0000	.42500	7.0000	.1700-01	.1400-01	.1900-01	.6638-03	.5486-03	.7416-03	.4430	4.235	548.4
100	1.0000	.45000	8.0000	.1830-01	.1520-01	.2050-01	.7174-03	.5929-03	.8015-03	.4430	4.514	548.4
100	1.0000	.47500	9.0000	.1790-01	.1490-01	.2000-01	.7020-03	.5803-03	.7842-03	.4330	4.400	548.1
100	1.0000	.50000	10.0000	.1930-01	.1590-01	.2150-01	.7545-03	.6237-03	.8429-03	.4560	4.708	548.1
100	1.0000	.52500	11.0000	.2320-01	.1920-01	.2590-01	.9064-03	.7492-03	.1013-02	.5590	5.649	548.6
100	1.0000	.55000	12.0000	.2510-01	.2070-01	.2800-01	.9801-03	.8100-03	.1095-02	.6050	6.053	548.6
100	1.0000	.57500	13.0000	.4720-01	.3900-01	.5280-01	.1846-02	.1524-02	.2064-02	.1131	11.40	552.8
100	1.0000	.60000	14.0000	.5710-01	.4710-01	.6390-01	.2233-02	.1843-02	.2498-02	1.365	13.75	554.4
100	1.0000	.62500	15.0000	.2110-01	.1740-01	.2350-01	.8239-03	.6907-03	.9207-03	.5070	4.942	549.9
100	1.0000	.65000	16.0000	.1500-01	.1240-01	.1870-01	.5855-03	.4938-03	.6542-03	.3510	3.644	549.2
100	1.0000	.67500	17.0000	.8200-02	.6700-02	.9100-02	.3195-03	.2639-03	.3570-03	.1970	1.898	550.1
100	1.0000	.70000	18.0000	.1340-01	.1110-01	.1500-01	.5252-03	.4340-03	.5859-03	.3240	3.784	549.4
100	1.0000	.72500	19.0000	.1300-01	.1090-01	.1460-01	.5036-03	.4212-03	.5693-03	.3140	3.698	548.4
100	1.0000	.75000	20.0000	.1890-01	.1560-01	.2110-01	.7336-03	.6112-03	.8263-03	.4560	5.363	549.9
100	1.0000	.77500	21.0000	.2400-01	.1980-01	.2680-01	.9370-03	.7739-03	.1047-02	.5750	6.731	550.8
100	1.0000	.80000	22.0000	.3290-01	.2720-01	.3580-01	.1288-02	.1064-02	.1439-02	.7920	8.798	550.2

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 77

(RVB001)

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) B62C12F10M16W127E52VBR19

RUN NUMBER	TIME	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTNOT DEG. R /SEC	TH DEG. R
100	2.0000	.53000	23.000	.6970-01	.5750-01	.7810-01	.2728-02	.2249-02	.3053-02	1.659	18.36	557.4
100	2.0000	.56700	24.000	.5890-01	.4860-01	.6590-01	.2304-02	.1900-02	.2578-02	1.404	15.17	555.9
100	2.0000	.62000	25.000	.2190-01	.1810-01	.2440-01	.8554-03	.7067-03	.9560-03	.5260	5.703	550.1
100	2.0000	.87000	26.000	.1320-01	.1090-01	.1480-01	.1566-03	.1271-03	.1571-03	.3190	3.461	547.9
100	2.0000	.70500	27.000	.1010-01	.8300-02	.1120-01	.3932-03	.3251-03	.4393-03	.2430	2.612	547.2
100	2.0000	.75000	28.000	.7500-02	.6200-02	.8400-02	.2930-03	.2423-03	.3273-03	.1810	1.984	547.5
100	2.0000	.82000	29.000	.6000-02	.5000-02	.6700-02	.2353-03	.1945-03	.2629-03	.1450	1.598	548.4
100	2.0000	.82400	30.000	.1800-02	.1500-02	.2000-02	.7003-04	.5788-04	.7824-04	.4300-01	.6000	548.5
100	3.0000	.20000	1.000	.2920-01	.2410-01	.3270-01	.1142-02	.9424-03	.1278-02	.6970	7.355	555.2
100	3.0000	.22500	32.000	.2470-01	.2040-01	.2770-01	.9879-03	.7988-03	.1082-02	.5920	6.597	553.7
100	3.0000	.25000	33.000	.1870-01	.1540-01	.2090-01	.7304-03	.6033-03	.8331-03	.4490	5.008	551.0
100	3.0000	.27500	34.000	.1450-01	.1230-01	.1620-01	.5866-03	.4682-03	.6331-03	.3490	4.172	549.2
100	3.0000	.30000	35.000	.1300-01	.1070-01	.1450-01	.5074-03	.4193-03	.5668-03	.3130	3.866	548.5
100	3.0000	.32500	36.000	.1370-01	.1130-01	.1530-01	.5349-03	.4421-03	.5976-03	.3300	3.861	548.4
100	3.0000	.35000	37.000	.1510-01	.1250-01	.1690-01	.5912-03	.4887-03	.6604-03	.3650	4.227	548.1
100	3.0000	.37500	38.000	.2570-01	.2120-01	.2870-01	.1004-02	.8294-03	.1122-02	.6180	7.221	550.2
100	3.0000	.40000	39.000	.3240-01	.2680-01	.3620-01	.1267-02	.1047-02	.1416-02	.7800	9.168	550.0
100	3.0000	.42500	40.000	.4240-01	.3500-01	.4740-01	.1660-02	.1370-02	.1856-02	1.016	11.98	553.6
100	3.0000	.45000	41.000	.5750-01	.4740-01	.6430-01	.2247-02	.1854-02	.2514-02	1.372	15.59	555.0
100	3.0000	.47500	42.000	.6700-01	.5520-01	.7500-01	.2621-02	.2160-02	.2934-02	1.592	17.60	558.3
100	3.0000	.50000	43.000	.5040-01	.4150-01	.5640-01	.1973-02	.1627-02	.2207-02	1.204	13.33	555.2
100	3.0000	.52500	44.000	.2490-01	.2060-01	.2780-01	.9732-03	.8040-03	.1088-02	.5990	7.001	550.1
100	3.0000	.55000	45.000	.1780-01	.1470-01	.1990-01	.6980-03	.5768-03	.7799-03	.4300	4.782	548.9
100	3.0000	.60000	46.000	.1170-01	.9700-02	.1310-01	.4580-03	.3787-03	.5116-03	.2830	3.070	547.6
100	3.0000	.65000	47.000	.8000-02	.5700-02	.9000-02	.3147-03	.2602-03	.3515-03	.1950	2.052	546.8
100	3.0000	.70000	48.000	.5700-02	.4700-02	.6400-02	.2236-03	.1849-03	.2497-03	.1380	1.523	546.9
100	3.0000	.75000	49.000	.3900-02	.3200-02	.4300-02	.1512-03	.1251-03	.1689-03	.9400-01	1.015	547.0
100	3.0000	.80000	50.000	.1500-02	.1200-02	.1700-02	.5855-04	.4840-04	.6540-04	.3600-01	.3870	547.5
100	3.0000	.85000	51.000	.3600-02	.3000-02	.4100-02	.1420-03	.1173-03	.1587-03	.8700-01	1.078	550.1
100	3.0000	.87500	52.000	.7900-02	.6500-02	.8800-02	.3072-03	.2537-03	.3435-03	.1890	2.324	551.9
100	3.0000	.90000	53.000	.9800-02	.8100-02	.1090-01	.3826-03	.3158-03	.4278-03	.2340	3.246	553.3
100	3.0000	.92500	54.000	.1140-01	.9400-02	.1280-01	.4467-03	.3687-03	.4995-03	.2730	3.564	553.7
100	3.0000	.95000	55.000	.1110-01	.9200-02	.1240-01	.4340-03	.3582-03	.4852-03	.2660	2.881	552.8
100	4.0000	.20000	71.000	.3520-01	.2990-01	.4060-01	.1417-02	.1168-02	.1587-02	.8610	7.762	558.3
100	4.0000	.22500	72.000	.2800-01	.2310-01	.3130-01	.1095-02	.9042-03	.1226-02	.6690	7.798	555.3
100	4.0000	.25000	73.000	.2140-01	.1770-01	.2400-01	.8380-03	.6918-03	.9371-03	.5140	5.995	552.7
100	4.0000	.27500	74.000	.1830-01	.1510-01	.2050-01	.7156-03	.5910-03	.7999-03	.4390	5.419	551.4
100	4.0000	.30000	75.000	.1470-01	.1220-01	.1640-01	.5758-03	.4758-03	.6474-03	.3550	4.635	549.5
100	4.0000	.32500	76.000	.2790-01	.2310-01	.3120-01	.1092-02	.9017-03	.1221-02	.6700	8.747	551.9
100	4.0000	.35000	77.000	.4850-01	.4000-01	.5430-01	.1900-02	.1565-02	.2126-02	1.156	15.05	556.8
100	4.0000	.37500	78.000	.6180-01	.5090-01	.6920-01	.2418-02	.1932-02	.2706-02	1.467	19.09	558.7
100	4.0000	.40000	79.000	.3820-01	.3160-01	.4290-01	.1495-02	.1234-02	.1673-02	.9150	11.92	553.9
100	4.0000	.42500	80.000	.2290-01	.1890-01	.2540-01	.8935-03	.7355-03	.9955-03	.5470	7.141	551.3

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 78

OH-74 (AEDC V418-B8A) B62C12F19M16H127E32VBR19

(RV8001)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H/GTO BTU/ R FT2SEC	H/GTO BTU/ R FT2SEC	H/TAN BTU/ R FT2SEC	QDOT BTU/ FT2SEC	QTHOT DEG. R /SEC	TH DEG. R
100	4.0000	.45000	62.000	.1390-01	.1150-01	.1550-01	.5430-03	.4487-03	.6068-03	.3350	4.351	549.4
100	4.0000	.47500	63.000	.1130-01	.9300-02	.1260-01	.4412-03	.3646-03	.4930-03	.2720	3.453	549.2
100	4.0000	.50000	64.000	.8100-02	.6700-02	.9100-02	.3182-03	.2630-03	.3555-03	.1960	2.425	548.4
100	4.0000	.52500	65.000	.7300-02	.6000-02	.8100-02	.2839-03	.2347-03	.3172-03	.1750	2.165	548.2
100	4.0000	.55000	66.000	.5800-02	.4800-02	.6500-02	.2274-03	.1880-03	.2540-03	.1400	1.644	547.8
100	4.0000	.60000	67.000	.4300-02	.3500-02	.4800-02	.1673-03	.1383-03	.1869-03	.1030	1.161	547.5
100	4.0000	.65000	68.000	.3400-02	.2800-02	.3800-02	.1347-03	.1113-03	.1504-03	.8300-01	.9740	547.5
100	4.0000	.70000	69.000	.2000-02	.1600-02	.2200-02	.7738-04	.6396-04	.8544-04	.4800-01	.5310	548.0
100	4.0000	.75000	70.000	.1200-02	1000-02	.1300-02	.4703-04	.3888-04	.5253-04	.2900-01	.3230	547.6
100	4.0000	.80000	75.000	.9000-02	.8000-03	.1000-02	.3617-04	.2989-04	.4042-04	.2200-01	.2670	549.8
100	4.0000	.85000	76.000	.1600-02	.1300-02	.1700-02	.6077-04	.5022-04	.6791-04	.3700-01	.4420	549.5
100	4.0000	.87500	77.000	.2700-02	.2200-02	.3000-02	.1053-03	.8696-04	.1177-03	.6500-01	.8440	551.3
100	4.0000	.90000	78.000	.4000-02	.3400-02	.4300-02	.1555-03	.1332-03	.1698-03	.1200	1.680	394.5
100	4.0000	.92500	79.000	.6000-02	.3000-02	.6700-02	.2333-03	.1926-03	.2608-03	.1430	1.763	552.2
100	4.0000	.95000	80.000	.5200-02	.4300-02	.5900-02	.2047-03	.1690-03	.2289-03	.1250	1.464	552.7

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 79

(RV8001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
101	7.980	29.87	547.8	1288.	180.0	.0000	93.80	.5700-01	2.542	3786.	.5103-04	.7549-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC /FT	STN NO R= .0175 .2532-01
101	2.559	.3909-01	.2532-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(970) BTU/ R FT ² SEC	H(101) BTU/ R FT ² SEC	H(141) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTWDT DEG. R /SEC	TM DEG. R
101	1.0000	.27500	1.0000	.1370-01	.1130-01	.1530-01	.5338-03	.4410-03	.5966-03	.3270	3.380	547.2
101	1.0000	.30000	2.0000	.1220-01	.1010-01	.1360-01	.4768-03	.3939-03	.5328-03	.2920	3.094	546.7
101	1.0000	.32500	3.0000	.1030-01	.8500-02	.1150-01	.4024-03	.3326-03	.4496-03	.2470	2.534	545.4
101	1.0000	.35000	4.0000	.1040-01	.8600-02	.1170-01	.4085-03	.3376-03	.4584-03	.2510	2.595	545.6
101	1.0000	.37500	5.0000	.1140-01	.9400-02	.1280-01	.4462-03	.3688-03	.4985-03	.2740	2.876	545.5
101	1.0000	.40000	6.0000	.1930-01	.1600-01	.2160-01	.7558-03	.6245-03	.8445-03	.4630	4.746	546.7
101	1.0000	.42500	7.0000	.1950-01	.1610-01	.2180-01	.7615-03	.6291-03	.8510-03	.4660	4.821	547.2
101	1.0000	.45000	8.0000	.2090-01	.1720-01	.2330-01	.8164-03	.6743-03	.9125-03	.4990	5.091	547.8
101	1.0000	.47500	9.0000	.1820-01	.1500-01	.2030-01	.7112-03	.5876-03	.7948-03	.4350	4.423	546.9
101	1.0000	.50000	10.000	.2530-01	.2170-01	.2930-01	.1026-02	.8478-03	.1147-02	.6280	6.345	547.6
101	1.0000	.52500	11.000	.2520-01	.2400-01	.3240-01	.1134-02	.9364-03	.1268-02	.6320	6.995	548.5
101	1.0000	.55000	12.000	.3520-01	.2900-01	.3930-01	.1374-02	.1135-02	.1536-02	.8390	8.406	548.3
101	1.0000	.60000	13.000	.2840-01	.2340-01	.3180-01	.1110-02	.9165-03	.1242-02	.6770	6.830	550.0
101	1.0000	.65000	14.000	.2380-01	.1970-01	.2650-01	.9305-03	.7684-03	.1040-02	.5880	5.742	548.4
101	1.0000	.70000	15.000	.2010-01	.1680-01	.2250-01	.7858-03	.6490-03	.8733-03	.4800	4.683	548.1
101	1.0000	.75000	16.000	.9200-02	.3000-02	.4000-02	.1407-03	.1152-03	.1572-03	.8500-01	2.216	545.8
101	1.0000	.80000	17.000	.3600-02	.1490-01	.1650-01	.5816-03	.4804-03	.6511-03	.3560	4.164	547.6
101	2.0000	.28500	18.000	.1260-01	.1040-01	.1410-01	.4931-03	.5510-03	.1134-02	.6300	7.299	548.4
101	2.0000	.39000	20.000	.2600-01	.2140-01	.2900-01	.1015-02	.8379-03	.1300-02	.7090	8.291	549.4
101	2.0000	.42600	21.000	.2970-01	.2460-01	.3330-01	.1163-02	.9600-03	.1939-02	1.054	11.69	551.2
101	2.0000	.47800	22.000	.4430-01	.3650-01	.4960-01	.1733-02	.1430-02				

DATE 07 OCT 75

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 80

04-74 (AEDC V418-B8A) 862C12F10M16H127E52V8R19

(RV8001)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H(GT) BTU/ R FT2SEC	H(TO) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TW DEG. P
101	2.0000	.53000	23.000	.2870-01	.2370-01	.3210-01	.1121-02	.9255-03	.1254-02	.6830	7.584	550.1
101	2.0000	.56700	24.000	.1960-01	.1620-01	.2190-01	.7646-03	.6315-03	.8546-03	.4670	5.070	547.8
101	2.0000	.62000	25.000	.1330-01	.1100-01	.1490-01	.5211-03	.4305-03	.5824-03	.3197	3.460	547.2
101	2.0000	.67000	26.000	.9000-02	.7500-02	.1010-01	.3527-03	.2914-03	.3941-03	.2160	2.347	546.3
101	2.0000	.70500	27.000	.7400-02	.6100-02	.8300-02	.2891-03	.2389-03	.3230-03	.1770	1.906	545.9
101	2.0000	.75000	28.000	.4600-02	.3800-02	.5200-02	.1805-03	.1492-03	.2016-03	.1110	1.215	545.2
101	2.0000	.80000	29.000	.2200-02	.1800-02	.2400-02	.8525-04	.7046-04	.9525-04	.5200-01	.5760	545.7
101	2.0000	.82400	30.000	.5000-03	.4000-03	.5000-03	.1830-04	.1512-04	.2045-04	.1100-01	.1560	547.0
101	3.0000	.20000	31.000	.3070-01	.2530-01	.3430-01	.1199-02	.9890-03	.1342-02	.7260	7.668	553.7
101	3.0000	.22500	32.000	.2620-01	.2160-01	.2930-01	.1021-02	.8446-03	.1145-02	.6220	6.930	552.1
101	3.0000	.25000	33.000	.2040-01	.1690-01	.2280-01	.7961-03	.6573-03	.8901-03	.4850	5.420	549.4
101	3.0000	.27500	34.000	.1580-01	.1300-01	.1760-01	.6173-03	.5099-03	.6899-03	.3780	4.515	547.5
101	3.0000	.30000	35.000	.1350-01	.1120-01	.1510-01	.5282-03	.4364-03	.5903-03	.3240	4.000	546.6
101	3.0000	.32500	36.000	.1410-01	.1160-01	.1570-01	.5507-03	.4570-03	.6153-03	.3370	3.952	546.4
101	3.0000	.35000	37.000	.2500-01	.2060-01	.2790-01	.9755-03	.8056-03	.1090-02	.5950	6.901	548.2
101	3.0000	.37500	38.000	.3370-01	.2790-01	.3770-01	.1319-02	.1089-02	.1475-02	.8050	9.415	549.0
101	3.0000	.40000	39.000	.3140-01	.2590-01	.3510-01	.1226-02	.1013-02	.1371-02	.7490	8.802	548.9
101	3.0000	.42500	40.000	.3170-01	.2620-01	.3540-01	.1239-02	.1023-02	.1386-02	.7540	8.908	550.5
101	3.0000	.45000	41.000	.3520-01	.2910-01	.3940-01	.1376-02	.1135-02	.1538-02	.8390	9.557	549.5
101	3.0000	.47500	42.000	.2300-01	.1900-01	.2570-01	.8989-03	.7423-03	.1005-02	.5490	6.103	548.4
101	3.0000	.50000	43.000	.1820-01	.1500-01	.2030-01	.7110-03	.5874-03	.7946-03	.4350	4.842	547.0
101	3.0000	.52500	44.000	.1210-01	.1000-01	.1350-01	.4714-03	.3895-03	.5267-03	.2690	3.382	546.5
101	3.0000	.55000	45.000	.1580-01	.1200-01	.1610-01	.4225-03	.3492-03	.4721-03	.1660	2.883	546.0
101	3.0000	.57500	46.000	.5900-02	.5700-02	.7700-02	.2703-03	.2234-03	.3020-03	.1560	1.802	545.4
101	3.0000	.60000	47.000	.5000-02	.4200-02	.5600-02	.1974-03	.1632-03	.2205-03	.1210	1.286	544.9
101	3.0000	.70000	48.000	.3500-02	.2900-02	.3900-02	.1368-03	.1131-03	.1528-03	.8400-01	.9260	545.0
101	3.0000	.75000	49.000	.1500-02	.1200-02	.1700-02	.5845-04	.4832-04	.6529-04	.3600-01	.3900	544.7
101	3.0000	.80000	50.000	.1300-02	.1000-02	.1400-02	.4948-04	.4089-04	.5528-04	.3000-01	.3250	545.8
101	3.0000	.85000	51.000	.1700-02	.1400-02	.2000-02	.6841-04	.5650-04	.7647-04	.4200-01	.5160	548.3
101	3.0000	.87500	52.000	.2400-02	.2000-02	.2700-02	.9335-04	.7758-04	.1044-03	.5700-01	.7030	549.2
101	3.0000	.90000	53.000	.3500-02	.2900-02	.3900-02	.1371-03	.1132-03	.1533-03	.8420-01	1.160	550.0
101	3.0000	.92500	54.000	.4600-02	.3900-02	.5100-02	.1781-03	.1470-03	.1992-03	.1190	1.416	550.4
101	3.0000	.95000	55.000	.3680-01	.3230-01	.4120-01	.1438-02	.1185-02	.1517-03	.8300-01	.8340	550.1
101	3.0000	.97500	56.000	.2590-01	.2220-01	.3010-01	.1053-02	.8698-03	.1179-02	.6390	9.845	556.2
101	4.0000	.22500	72.000	.2070-01	.1710-01	.2320-01	.8100-03	.6585-03	.9059-03	.4930	7.454	550.6
101	4.0000	.25000	73.000	.2020-01	.1660-01	.2250-01	.7894-03	.6500-03	.8815-03	.4930	5.929	549.8
101	4.0000	.27500	74.000	.2020-01	.1670-01	.2250-01	.7892-03	.6517-03	.8812-03	.4820	6.301	548.6
101	4.0000	.30000	75.000	.3610-01	.3140-01	.4260-01	.1490-02	.1229-02	.1657-02	.9040	11.80	552.2
101	4.0000	.32500	76.000	.3950-01	.3250-01	.4420-01	.1546-02	.1275-02	.1730-02	.9370	12.22	553.2
101	4.0000	.35000	77.000	.2260-01	.1860-01	.2520-01	.8817-03	.7279-03	.9859-03	.5380	7.026	549.5
101	4.0000	.37500	78.000	.1750-01	.1450-01	.1950-01	.6849-03	.5656-03	.7656-03	.4180	5.459	548.5
101	4.0000	.40000	79.000	.1250-01	.1030-01	.1390-01	.4874-03	.4027-03	.5448-03	.2980	3.902	547.3

DATE 07 CC 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 81

OH-74 (AEDC V418-B8A) 862C12F:OH16W127E52VBRI9

(PVB001)

RUN NUMBER	TRAP E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(90) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
101	4.0000	.45000	62.000	.6200-02	.6800-02	.9200-02	.3213-03	.2455-03	.3590-03	.1970	2.548	546.3
101	4.0000	.47500	63.000	.6400-02	.5300-02	.7100-02	.2499-03	.2065-03	.2793-03	.1530	1.949	546.1
101	4.0000	.50000	64.000	.5000-02	.4100-02	.5600-02	.1956-03	.1616-03	.2185-03	.1200	1.484	545.7
101	4.0000	.52500	65.000	.4200-02	.3500-02	.4700-02	.1650-03	.1363-03	.1843-03	.1010	1.251	545.8
101	4.0000	.55000	66.000	.3900-02	.3200-02	.4300-02	.1515-03	.1252-03	.1693-03	.9700-01	1.089	545.6
101	4.0000	.56000	67.000	.2500-02	.2100-02	.2800-02	.9842-04	.8134-04	.1102-04	.6000-01	.6790	545.7
101	4.0000	.65000	68.000	.1600-02	.1400-02	.1800-02	.6410-04	.5238-04	.7162-04	.3900-01	.4610	545.6
101	4.0000	.70000	69.000	.5000-03	.4000-03	.5000-03	.2084-04	.1723-04	.2328-04	.1300-01	.1420	545.2
101	4.0000	.75000	70.000	.1000-02	.8000-03	.1100-02	.3829-04	.3164-04	.4278-04	.2300-01	.2610	546.0
101	4.0000	.80000	75.000	.8000-03	.7000-03	.9000-03	.3113-04	.2571-04	.3479-04	.1900-01	.2290	548.0
101	4.0000	.87500	77.000	.1400-02	.1200-02	.1600-02	.5667-04	.4680-04	.6336-04	.3500-01	.4520	548.9
101	4.0000	.90000	78.000	.1600-02	.1300-02	.1800-02	.5280-04	.5184-04	.7021-04	.3700-01	.4950	549.4
101	4.0000	.92500	79.000	.1500-02	.1200-02	.1700-02	.5897-04	.4869-04	.6593-04	.3600-01	.4440	549.2
101	4.0000	.95000	80.000	.5200-02	.4300-02	.5900-02	.2047-03	.1690-03	.2289-03	.1250	1.464	552.7

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 82

(R/8001)

OH-74 (AEDC V41B-B7A) B62C12F10M16H127552V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	O PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
102	7.980	34.89	547.4	1290.	180.0	.0000	93.90	.5700-01	2.540	3789.	.5091-04	.7561-07

RUN NUMBER	RM/L X10 E /FT	HREF BTU/ R FT2SEC	STN NO R= .0175 .2535-01
102	2.551	.3903-01	.2535-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAR	H(910) BTU/ R FT2SEC	H(110) BTU/ R FT2SEC	H(120) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTWDT DEG. R /SEC	TH DEG. R
102	1.0000	.27500	1.0000	.1490-01	.1230-01	.1660-01	.5824-03	.4812-03	.6508-03	.3570	3.696	547.5
102	1.0000	.30000	2.0000	.1340-01	.1110-01	.1500-01	.5245-03	.4334-03	.5861-03	.3220	3.410	547.2
102	1.0000	.32500	3.0000	.1170-01	.9700-02	.1310-01	.4569-03	.3777-03	.5105-03	.2810	2.880	546.4
102	1.0000	.35000	4.0000	.1270-01	.1050-01	.1420-01	.4057-03	.4105-03	.5549-03	.3050	3.158	546.6
102	1.0000	.37500	5.0000	.1830-01	.1520-01	.2050-01	.772-03	.5927-03	.8015-03	.4400	4.620	547.1
102	1.0000	.40000	6.0000	.2150-01	.1770-01	.2430-01	.812-03	.6934-03	.9377-03	.5150	5.278	547.4
102	1.0000	.42500	7.0000	.1500-01	.1320-01	.1790-01	.621-03	.5162-03	.6982-03	.3830	3.966	547.4
102	1.0000	.45000	8.0000	.2110-01	.1740-01	.2350-01	.821-03	.6806-03	.9205-03	.5050	5.156	547.5
102	1.0000	.47500	9.0000	.2660-01	.2150-01	.2910-01	.110-02	.8445-03	.1137-02	.6230	5.326	548.5
102	1.0000	.50000	10.000	.1970-01	.1550-01	.2090-01	.730-03	.6039-03	.8166-03	.4490	4.637	547.1
102	1.0000	.52500	11.000	.2900-01	.2400-01	.3240-01	.1134-02	.9370-03	.259-02	.6950	7.019	548.6
102	1.0000	.55000	12.000	.2840-01	.2350-01	.3170-01	.1110-02	.9167-03	.1240-02	.6800	6.809	548.2
102	1.0000	.57500	13.000	.2170-01	.1790-01	.2430-01	.8492-03	.7015-03	.9492-03	.5200	5.257	548.4
102	1.0000	.60000	14.000	.2720-01	.1910-01	.2590-01	.9055-03	.7481-03	.1012-02	.5550	5.609	548.1
102	1.0000	.62500	15.000	.6000-02	.7400-02	.9900-02	.3478-03	.2975-03	.3885-03	.2140	2.098	546.0
102	1.0000	.65000	16.000	.2700-02	.2300-02	.3000-02	.1067-03	.8479-04	.1122-03	.5600-01	5640	545.8
102	1.0000	.67500	17.000	.2600-02	.2200-02	.2900-02	.1029-03	.8505-04	.1150-03	.6300-01	6120	546.3
102	1.0000	.70000	18.000	.1550-01	.1280-01	.1730-01	.6051-03	.4949-03	.6733-03	.3710	4.340	548.1
102	1.0000	.72500	19.000	.1410-01	.1170-01	.1580-01	.5531-03	.4571-03	.6180-03	.3400	3.896	547.1
102	1.0000	.75000	20.000	.2650-01	.2190-01	.2660-01	.1036-02	.8558-03	.1159-02	.6340	7.457	548.9
102	1.0000	.77500	21.000	.2360-01	.1950-01	.2630-01	.9206-03	.7603-03	.1029-02	.5630	6.590	549.0
102	1.0000	.80000	22.000	.2390-01	.1980-01	.2680-01	.9362-03	.7733-03	.1046-02	.5740	6.375	548.3

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

OH-7A (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 83

(RV8001)

OH-7A (AEDC V41B-BBA) 862C12F10M16H127E52V8R19

RUN NUMBER	TRA.E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H(9TO) BTU/R FT2SEC	H(1TO) BTU/R FT2SEC	H(1AH) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
102	2.0000	.53000	23.000	.2380-01	.1970-01	.2660-01	.9312-03	.7691-03	.1041-02	.5700	8.330	549.2
102	2.0000	.56700	24.000	.1540-01	.1270-01	.1720-01	.6020-03	.4975-03	.8728-03	.3690	4.008	547.4
102	2.1300	.62000	25.000	.1170-01	.9600-02	.1300-01	.4555-03	.3765-03	.5090-03	.2800	3.037	546.7
102	2.1000	.67200	26.000	.5800-01	.4800-02	.6400-02	.2248-03	.1859-03	.2511-03	.1380	1.504	545.1
102	2.0000	.70500	27.000	.3600-02	.3000-02	.4000-02	.1414-03	.1169-03	.1579-03	.8700-01	.9370	544.8
102	2.0000	.75000	28.000	.1700-02	.1400-02	.1900-02	.6560-04	.5425-04	.7326-04	.4000-01	.4440	544.5
102	2.0000	.80000	29.000	.1900-02	.1600-02	.2200-02	.7567-04	.6256-04	.8453-04	.4700-01	.5130	545.4
102	2.0000	.82400	30.000	.6000-03	.5000-03	.6000-03	.2212-04	.1828-04	.2471-04	.1400-01	.1890	545.8
102	3.0000	.82400	31.000	.3170-01	.2620-01	.3550-01	.1240-02	.1023-02	.1388-02	.7540	7.965	553.0
102	3.0000	.82500	32.000	.2670-01	.2200-01	.2980-01	.1043-02	.8604-03	.1166-02	.6350	7.074	552.4
102	3.0000	.82500	33.000	.2080-01	.1720-01	.2330-01	.8140-03	.6721-03	.9100-03	.4970	5.553	549.9
102	3.0000	.82500	34.000	.1670-01	.1380-01	.1860-01	.6516-03	.5383-03	.5860-03	.3990	4.773	548.1
102	3.0000	.82500	35.000	.1340-01	.1110-01	.1500-01	.5245-03	.4334-03	.5860-03	.3220	3.981	546.3
102	3.0000	.82500	36.000	.1970-01	.1630-01	.2210-01	.7717-03	.6376-03	.8624-03	.4730	5.541	547.5
102	3.0000	.82500	37.000	.2950-01	.2440-01	.3300-01	.1154-02	.9529-03	.1289-02	.7060	8.178	548.7
102	3.0000	.82500	38.000	.2840-01	.2340-01	.3170-01	.1109-02	.9156-03	.1240-02	.5780	7.928	549.5
102	3.0000	.82500	39.000	.1930-01	.1640-01	.2220-01	.7775-03	.6425-03	.8689-03	.4770	5.616	547.2
102	3.0000	.82500	40.000	.3250-01	.2690-01	.3540-01	.1274-02	.1052-02	.1424-02	.7780	9.189	550.4
102	3.0000	.82500	41.000	.2380-01	.1960-01	.2650-01	.9286-03	.7672-03	.1039-02	.5690	6.489	548.1
102	3.0000	.82500	42.000	.2250-01	.1850-01	.2520-01	.8805-03	.7274-03	.9841-03	.5390	5.995	548.3
102	3.0000	.82500	43.000	.1910-01	.1520-01	.2130-01	.7457-03	.6162-03	.8333-03	.4590	5.089	547.4
102	3.0000	.82500	44.000	.1500-01	.1180-01	.1800-01	.4140-03	.3423-03	.4625-03	.2550	2.983	546.0
102	3.0000	.82500	45.000	.8500-02	.7400-02	.1000-01	.3482-03	.2879-03	.3890-03	.2140	2.395	545.5
102	3.0000	.82500	46.000	.5900-02	.4800-02	.6400-02	.2253-03	.1863-03	.2516-03	.1390	1.508	544.9
102	3.0000	.82500	47.000	.3900-02	.3200-02	.4300-02	.1501-03	.1241-03	.1677-03	.9300-01	.9810	544.8
102	3.0000	.82500	48.000	.1500-02	.1300-02	.1700-02	.5958-04	.4927-04	.6653-04	.3700-01	.4050	544.3
102	3.0000	.82500	49.000	.1400-02	.1200-02	.1600-02	.5662-04	.4682-04	.6323-04	.3500-01	.3790	544.6
102	3.0000	.82500	50.000	.1000-02	.8000-03	.1100-02	.3727-04	.3082-04	.4164-04	.2300-01	.2460	545.5
102	3.0000	.82500	51.000	.1200-02	.1000-02	.1300-02	.4520-04	.3735-04	.5051-04	.2800-01	.3430	547.4
102	3.0000	.82500	52.000	.1000-02	.8000-03	.1100-02	.3907-04	.3227-04	.4366-04	.2400-01	.2960	548.0
102	3.0000	.82500	53.000	.1100-02	.9000-03	.1200-02	.4329-04	.3575-04	.4838-04	.2700-01	.3690	548.7
102	3.0000	.82500	54.000	.1400-02	.1200-02	.1600-02	.5551-04	.4585-04	.6205-04	.3400-01	.4440	548.9
102	3.0000	.82500	55.000	.2100-02	.1700-02	.2400-02	.8240-04	.6806-04	.9211-04	.5000-01	.5090	548.9
102	4.0000	.82500	56.000	.3500-01	.2960-01	.4020-01	.1403-02	.1157-02	.1570-02	.8492	9.643	555.8
102	4.0000	.82500	57.000	.2530-01	.2170-01	.2950-01	.1029-02	.8422-03	.1152-02	.6260	7.304	553.1
102	4.0000	.82500	58.000	.2100-01	.1730-01	.2350-01	.8211-03	.6778-03	.9181-03	.5010	5.857	550.6
102	4.0000	.82500	59.000	.2400-01	.1980-01	.2680-01	.9374-03	.7738-03	.1048-02	.5720	7.054	550.9
102	4.0000	.82500	60.000	.2370-01	.1960-01	.2650-01	.9250-03	.7643-03	.1075-02	.5660	7.396	549.8
102	4.0000	.82500	61.000	.3230-01	.2680-01	.3510-01	.1261-02	.1041-02	.1411-02	.7690	10.04	551.5
102	4.0000	.82500	62.000	.2230-01	.1890-01	.2560-01	.8955-03	.7394-03	.1001-02	.5470	7.150	549.9
102	4.0000	.82500	63.000	.2190-01	.1810-01	.2440-01	.8544-03	.7056-03	.9551-03	.5230	6.832	549.2
102	4.0000	.82500	64.000	.2190-01	.1810-01	.2440-01	.8544-03	.7056-03	.9551-03	.5230	6.832	549.2
102	4.0000	.82500	65.000	.1540-01	.1350-01	.1930-01	.6393-03	.5292-03	.7145-03	.3920	5.128	547.2
102	4.0000	.82500	66.000	.9500-02	.7900-02	.1070-01	.3741-03	.3092-03	.4179-03	.2300	3.009	545.4

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 84

04-74 (AEDC V41B-B8A) 862C12F10M16M127E52V8R19

(RV8001)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(9T0) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAM) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
102	4.0000	.45000	62.000	.6600-02	.5400-02	.7400-02	.2577-03	.2130-03	.2879-03	.1590	2.052	545.6
102	4.0000	.47500	63.000	.5500-02	.4600-02	.6200-02	.2156-03	.1782-03	.2408-03	.1330	1.687	545.7
102	4.0000	.50000	64.000	.4200-02	.3500-02	.4700-02	.1646-03	.1361-03	.1839-03	.1010	1.254	545.2
102	4.0000	.52500	65.000	.3900-02	.3200-02	.4300-02	.1521-03	.1257-03	.1699-03	.9400-01	1.158	545.3
102	4.0000	.55000	66.000	.2900-02	.2400-02	.3300-02	.1150-03	.9509-04	.1285-03	.7100-01	.8300	545.4
102	4.0000	.60000	67.000	.1700-02	.1400-02	.1900-02	.6578-04	.5439-04	.7347-04	.4100-01	.4560	545.0
102	4.0000	.65000	68.000	.9000-03	.8000-03	.1000-02	.3606-04	.2982-04	.4026-04	.2200-01	.2500	545.2
102	4.0000	.70000	69.000	.7000-03	.6000-03	.8000-03	.2872-04	.2374-04	.3209-04	.1800-01	.1970	545.9
102	4.0000	.75000	70.000	.7000-03	.6000-03	.8000-03	.2839-04	.2347-04	.3171-04	.1700-01	.1940	545.6
102	4.0000	.80000	75.000	.5000-03	.4000-03	.6000-03	.2104-04	.1739-04	.2351-04	.1300-01	.1550	547.5
102	4.0000	.85000	76.000	.6000-03	.5000-03	.6000-03	.2215-04	.1831-04	.2475-04	.1400-01	.1610	546.9
102	4.0000	.87500	77.000	.1100-02	.9000-03	.1200-02	.4103-04	.3392-04	.4588-04	.2500-01	.3290	548.1
102	4.0000	.90000	78.000	.1100-02	.9000-03	.1200-02	.4153-04	.3430-04	.4642-04	.2500-01	.3290	548.6
102	4.0000	.92500	79.000	.1800-02	.1500-02	.2000-02	.6956-04	.5746-04	.7775-04	.4300-01	.5260	548.6
102	4.0000	.95000	80.000	.3000-02	.2400-02	.3300-02	.1154-03	.9531-04	.1290-03	.7100-01	.8250	546.5

DATE 07 OCT 75 OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RV80C1)

OH-74 (AEDC V41B-88A) B62C12F10H16H127E5EVR819

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
103	7.980	39.93	547.5	1297.	180.0	.0000	94.40	.5700-01	2.541	3800.	.5064-04	.7602-07

RUN NUMBER	RN/L X10.6 FT	HREF BTU/ R FT ² SEC	STN NO R= .0175 .2543-01
103	2.531	.3913-01	

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(3T0) BTU/ R FT ² SEC	H(T0T) BTU/ R FT ² SEC	H(TAH) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTMDT %G. R /SEC	TM DEG. R
103	1.0000	.27500	1.0000	.1510-01	.1240-01	.1680-01	.5877-03	.4861-03	.5562-03	.3650	3.776	546.5
103	1.0000	.30000	2.0000	.1290-01	.1070-01	.1440-01	.5061-03	.4187-03	.5551-03	.3140	3.331	543.2
103	1.0000	.32500	3.0000	.1190-01	.0900-02	.1330-01	.4658-03	.3634-03	.5200-03	.2900	2.973	545.2
103	1.0000	.35000	4.0000	.1840-01	.1530-01	.2060-01	.7219-03	.5972-03	.8050-03	.4490	4.644	545.9
103	1.0000	.37500	5.0000	.1470-01	.1540-01	.2080-01	.7303-03	.6041-03	.8154-03	.4540	4.763	546.0
103	1.0000	.40000	6.0000	.1760-01	.1460-01	.1970-01	.6891-03	.5700-03	.7695-03	.4280	4.388	546.4
103	1.0000	.42500	7.0000	.1810-01	.1500-01	.2020-01	.7095-03	.5869-03	.7923-03	.4400	4.558	546.6
103	1.0000	.45000	8.0000	.2810-01	.2320-01	.3140-01	.1100-02	.9095-03	.1229-02	.6810	6.943	546.4
103	1.0000	.47500	9.0000	.2140-01	.1770-01	.2390-01	.8374-03	.6924-03	.5353-03	.5190	5.267	547.8
103	1.0000	.50000	10.000	.2330-01	.1920-01	.2600-01	.9107-03	.7531-03	.1017-02	.5540	5.706	547.5
103	1.0000	.52500	11.000	.3070-01	.2530-01	.3430-01	.1200-02	.5918-03	.1340-02	.7420	7.496	548.9
103	1.0000	.55000	12.000	.2540-01	.2190-01	.2950-01	.1035-02	.8555-03	.1156-02	.6410	6.417	548.0
103	1.0000	.57500	13.000	.2370-01	.1980-01	.2670-01	.9360-03	.7737-03	.1046-02	.5790	5.848	548.9
103	1.0000	.60000	14.000	.1500-01	.1800-02	.1190-01	.4156-03	.3438-03	.4641-03	.2590	2.610	546.5
103	1.0000	.62500	15.000	.3670-02	.2600-02	.3600-02	.1246-03	.1031-03	.1391-03	.7800-01	.7570	545.3
103	1.0000	.65000	16.000	.3120-02	.2600-02	.3500-02	.1214-03	.1005-03	.1355-03	.7600-01	.7650	544.9
103	1.0000	.67500	17.000	.2330-02	.1900-02	.2500-02	.9312-04	.7455-04	.1005-03	.5600-01	.5420	545.7
103	2.0000	.29500	18.000	.1530-01	.1240-01	.1670-01	.5966-03	.4851-03	.6510-03	.3640	4.260	547.0
103	2.0000	.32000	19.000	.2120-01	.1570-01	.2260-01	.7910-03	.5541-03	.8833-03	.4900	5.772	547.2
103	2.0000	.34500	20.000	.1500-01	.1620-01	.2180-01	.7642-03	.6321-03	.8535-03	.4740	5.580	547.0
103	2.0000	.37000	21.000	.3510-01	.2900-01	.3920-01	.1374-02	.1135-02	.1535-02	.8490	9.923	549.5
103	2.0000	.39500	22.000	.2870-01	.2370-01	.3270-01	.1124-02	.9291-03	.1256-02	.5950	7.724	549.9

DATE 07 OCT 75

OH-74 (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 86

(RV8001)

OH-74 (AEDC V418-98A) B62C12F10M16H127E52V8R19

RUN NUMBER	TRAIE	X/L	T/C F2	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H(GTO) FT/SEC	H(TO) FT/SEC	H(TAW) BTU/R	QOOT BTU/ FT2SEC	DTWOT DEC/R	TH DEC. R
103	2.0000	.53000	23.000	.1870-01	.1540-01	.2090-01	.7311-03	.6044-03	.8166-03	.4530	5.070	548.3
103	2.0000	.56700	24.000	.1310-01	.1080-01	.1460-01	.5132-03	.4244-03	.5731-03	.3180	3.471	547.1
103	2.0000	.62000	25.000	.7100-02	.5900-02	.8000-02	.2790-03	.2308-03	.3115-03	.1730	1.881	546.2
103	2.0000	.67000	26.000	.3300-02	.2700-02	.3700-02	.1300-03	.1076-03	.1451-03	.8100-01	.8780	545.1
103	2.0000	.70500	27.000	.2100-02	.1800-02	.2400-02	.8307-04	.6876-04	.9272-04	.5200-01	.5570	544.2
103	2.0000	.75000	28.000	.3000-02	.2500-02	.3400-02	.1192-03	.9866-04	.1331-03	.7400-01	.8150	544.3
103	2.0000	.80000	29.000	.2200-02	.1800-02	.2500-02	.8636-04	.7147-04	.9640-04	.5930	.5930	544.8
103	2.0000	.82400	30.000	.5000-03	.4000-03	.5000-03	.1842-04	.1524-04	.2056-04	.1100-01	.1590	545.5
103	3.0000	.20000	31.000	.3260-01	.2690-01	.3650-01	.1276-02	.1054-02	.1126-02	.7850	8.299	551.8
103	3.0000	.22500	32.000	.2660-01	.2200-01	.2970-01	.1041-02	.8599-03	.1163-02	.6410	7.155	551.1
103	3.0000	.25000	33.000	.2060-01	.1700-01	.2300-01	.8064-03	.6666-03	.9008-03	.4990	5.572	548.7
103	3.0000	.27500	34.000	.1550-01	.1280-01	.1730-01	.6058-03	.5011-03	.5766-03	.3760	4.495	546.9
103	3.0000	.30000	35.000	.1560-01	.1290-01	.1740-01	.6058-03	.5044-03	.6638-03	.3790	4.681	546.3
103	3.0000	.32500	36.000	.2720-01	.2250-01	.3040-01	.1065-02	.8806-03	.1190-02	.6590	7.715	548.2
103	3.0000	.35000	37.000	.2780-01	.2300-01	.3110-01	.1088-02	.8998-03	.1216-02	.5730	7.797	548.5
103	3.0000	.37500	38.000	.2170-01	.1800-01	.2430-01	.8501-03	.7030-03	.9493-03	.5270	6.171	547.2
103	3.0000	.40000	39.000	.2780-01	.2300-01	.3100-01	.1087-02	.8985-03	.1214-02	.6730	7.915	548.1
103	3.0000	.42500	40.000	.2640-01	.2180-01	.2950-01	.1035-02	.8550-03	.1156-02	.6390	7.548	549.8
103	3.0000	.45000	41.000	.2280-01	.1890-01	.2550-01	.8936-03	.7390-03	.9980-03	.5540	6.317	547.5
103	3.0000	.47500	42.000	.2030-01	.1680-01	.2270-01	.7935-03	.6563-03	.8863-03	.4920	5.472	547.2
103	3.0000	.50000	43.000	.1380-01	.1140-01	.1540-01	.5399-03	.4467-03	.6028-03	.3360	3.735	545.7
103	3.0000	.52500	44.000	.8300-02	.6900-02	.9300-02	.3262-03	.2699-03	.3641-03	.2030	2.378	545.2
103	3.0000	.55000	45.000	.6900-02	.5700-02	.7700-02	.2714-03	.2246-03	.3030-03	.1690	1.878	545.4
103	3.0000	.60000	46.000	.4300-02	.3600-02	.4800-02	.1684-03	.1394-03	.1880-03	.1050	1.139	544.5
103	3.0000	.65000	47.000	.2100-02	.1700-02	.2300-02	.8127-04	.6727-04	.9071-04	.5100-01	.5370	544.0
103	3.0000	.70000	48.000	.2000-02	.1700-02	.2300-02	.8017-04	.6636-04	.8947-04	.5000-01	.5510	544.0
103	3.0000	.75000	49.000	.2600-02	.2100-02	.2900-02	.1014-03	.8395-04	.1132-03	.6300-01	.6870	544.4
103	3.0000	.80000	50.000	.2500-02	.2100-02	.2800-02	.9780-04	.8093-04	.1032-03	.6100-01	.6520	544.9
103	3.0000	.85000	51.000	.1500-02	.1300-02	.1700-02	.6004-04	.4967-04	.6705-04	.3700-01	.4610	546.6
103	3.0000	.87500	52.000	.1800-02	.1500-02	.2000-02	.7046-04	.5827-04	.7859-04	.4400-01	.5400	547.2
103	3.0000	.90000	53.000	.2200-02	.1800-02	.2400-02	.8573-04	.7089-04	.9576-04	.5300-01	.7380	548.0
103	3.0000	.92500	54.000	.3700-02	.3100-02	.4100-02	.1453-03	.1202-03	.1624-03	.9000-01	1.176	548.4
103	3.0000	.95000	55.000	.6000-02	.4900-02	.6700-02	.2340-03	.1935-03	.2614-03	.1450	1.463	548.5
103	4.0000	.20000	71.000	.3380-01	.2790-01	.3780-01	.1321-02	.1090-02	.1477-02	.8090	9.190	555.0
103	4.0000	.22500	72.000	.2700-01	.2230-01	.3020-01	.1057-02	.8728-03	.1182-02	.6500	7.586	552.6
103	4.0000	.25000	73.000	.2350-01	.1940-01	.2620-01	.9177-03	.7581-03	.1026-02	.5650	6.607	551.1
103	4.0000	.27500	74.000	.2650-01	.2190-01	.2960-01	.1036-02	.8555-03	.1158-02	.6390	7.866	551.4
103	4.0000	.30000	75.000	.2850-01	.2350-01	.3180-01	.1114-02	.9201-03	.1244-02	.6880	9.000	549.4
103	4.0000	.32500	76.000	.2650-01	.2190-01	.2960-01	.1037-02	.8571-03	.1159-02	.6410	8.374	549.4
103	4.0000	.35000	77.000	.2300-01	.1900-01	.2570-01	.8987-03	.7426-03	.1044-02	.5550	7.259	549.4
103	4.0000	.37500	78.000	.2430-01	.2010-01	.2710-01	.9504-03	.7857-03	.1062-02	.5880	7.687	548.7
103	4.0000	.40000	79.000	.1280-01	.1060-01	.1430-01	.4998-03	.4135-03	.5591-03	.3100	4.063	546.3
103	4.0000	.42500	81.000	.8100-02	.6700-02	.9100-02	.3186-03	.2636-03	.3557-03	.1980	2.594	545.5

DATE 07 OCT 75 OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RV8001)

OH-74 (AEDC V41B-B8A) B62C12F10M16H127E52VBR19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TH DEG. R
103	4.0000	.45000	82.000	.5900-02	.4900-02	.6600-02	.2317-03	.1917-03	.2587-03	.1440	1.888	545.2
103	4.0000	.47500	83.000	.4700-02	.3900-02	.5200-02	.1838-03	.1520-03	.2050-03	.1140	1.454	544.9
103	4.0000	.50000	84.000	.3500-02	.2900-02	.3900-02	.1358-03	.1124-03	.1516-03	.8500-01	1.047	544.5
103	4.0000	.52500	85.000	.2800-02	.2300-02	.3100-02	.1101-03	.9111-04	.1229-03	.6800-01	.6470	545.2
103	4.0000	.55000	86.000	.2000-02	.1700-02	.2300-02	.8016-04	.6634-04	.8949-04	.5000-01	.5850	545.0
103	4.0000	.60000	87.000	.8000-03	.6000-03	.9000-03	.3064-04	.2536-04	.3420-04	.1900-01	.2150	544.6
103	4.0000	.65000	88.000	.1200-02	.1000-02	.1300-02	.4660-04	.3956-04	.5202-04	.2900-01	.3400	545.0
103	4.0000	.70000	89.000	.1700-02	.1400-02	.1900-02	.6512-04	.5389-04	.7270-04	.4100-01	.4510	544.8
103	4.0000	.75000	90.000	.2000-02	.1700-02	.2300-02	.7982-04	.6604-04	.8912-04	.5000-01	.5520	545.7
103	4.0000	.80000	91.000	.1200-02	.1000-02	.1300-02	.4717-04	.3901-04	.5269-04	.2900-01	.3520	547.1
103	4.0000	.85000	92.000	.4000-03	.4000-03	.5000-03	.1676-04	.1387-04	.1872-04	.1000-01	.1230	545.7
103	4.0000	.87500	93.000	.1000-02	.8000-03	.1100-02	.3948-04	.3265-04	.4409-04	.2400-01	.3200	547.2
103	4.0000	.90000	94.000	.1800-02	.1500-02	.2100-02	.7196-04	.5950-04	.8037-04	.4500-01	.5760	547.9
103	4.0000	.92500	95.000	.3300-02	.3300-02	.4400-02	.1543-03	.1276-03	.1723-03	.9600-01	1.180	548.0
103	4.0000	.95000	96.000	.5200-02	.4300-02	.5900-02	.2052-03	.1696-03	.2293-03	.1270	1.484	549.0

DATE 07 OCT 75

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 88

04-74 (AEDC V41B-88A) B62C12F10M16W127E52V8R19

(RV8001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAH DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
104	7.980	43.90	547.0	1303.	180.0	.0000	94.90	.5700-01	2.538	3808.	.5036-04	.7637-07

RUN NUMBER	RN/L X10 6 /FT	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAH DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
104	2.511	43.90	547.0	1303.	180.0	.0000	94.90	.5700-01	2.538	3808.	.5036-04	.7637-07

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H(ISO) BTU/ R FT ² SEC	H(ISO) BTU/ R FT ² SEC	H(ISO) BTU/ R FT ² SEC	QOOT BTU/ R FT ² SEC	DTMD1 DEG. R /SEC	TW DEG. R
104	1.0000	.27500	1.0000	.1500-01	.1240-01	.1670-01	.5856-03	.4848-03	.6536-03	.3670	3.795	546.5
104	1.0000	.30000	2.0000	.1310-01	.1090-01	.1460-01	.5134-03	.4250-03	.5730-03	.3220	3.408	546.2
104	1.0000	.32500	3.0000	.1380-01	.1150-01	.1540-01	.5416-03	.4484-03	.6043-03	.3400	3.485	545.4
104	1.0000	.35000	4.0000	.2000-01	.1650-01	.2230-01	.7822-03	.6475-03	.8730-03	.4900	5.073	546.2
104	1.0000	.37500	5.0000	.1750-01	.1450-01	.1950-01	.6852-03	.5673-03	.7647-03	.4300	4.511	545.8
104	1.0000	.40000	6.0000	.1750-01	.1450-01	.1980-01	.6856-03	.5678-03	.7654-03	.4300	4.411	545.7
104	1.0000	.42500	7.0000	.2310-01	.1910-01	.2580-01	.9039-03	.7482-03	.1009-02	.5660	5.857	546.6
104	1.0000	.45000	8.0000	.2590-01	.2150-01	.2890-01	.1015-02	.8401-03	.1133-02	.6350	6.478	547.2
104	1.0000	.47500	9.0000	.1990-01	.1650-01	.2220-01	.7785-03	.6444-03	.8589-03	.4870	4.952	545.6
104	1.0000	.50000	10.000	.3050-01	.2540-01	.3420-01	.1199-02	.9825-03	.1339-02	.7500	7.580	547.5
104	1.0000	.52500	11.000	.3140-01	.2600-01	.3500-01	.1228-02	.1016-02	.1371-02	.7670	7.750	543.0
104	1.0000	.55000	12.000	.2770-01	.2130-01	.2870-01	.1007-02	.8334-03	.1124-02	.6300	6.316	545.7
104	1.0000	.57500	13.000	.1780-01	.1470-01	.1990-01	.6969-03	.5768-03	.7779-03	.4360	4.410	545.9
104	1.0000	.60000	14.000	.5500-02	.4500-02	.6200-02	.2151-03	.1790-03	.2411-03	.1360	1.373	544.9
104	1.0000	.62500	15.000	.2000-02	.1700-02	.2200-02	.7854-04	.6506-04	.8762-04	.4900-01	.4820	544.0
104	1.0000	.65000	16.000	.4700-02	.3900-02	.5200-02	.1822-03	.1509-03	.2032-03	.8100-01	1.158	544.6
104	1.0000	.67500	17.000	.3300-02	.2700-02	.3700-02	.1290-03	.1068-03	.1440-03	.8100-01	1.158	544.6
104	1.0000	.70000	18.000	.1550-01	.1280-01	.1730-01	.6050-03	.5007-03	.6753-03	.3790	4.432	546.9
104	1.0000	.72500	19.000	.2580-01	.2140-01	.2880-01	.1011-02	.8361-03	.1128-02	.6310	7.425	548.1
104	1.0000	.75000	20.000	.2200-01	.1820-01	.2460-01	.8615-03	.7131-03	.9616-03	.5390	6.349	546.6
104	1.0000	.77500	21.000	.3680-01	.3040-01	.4110-01	.1439-02	.1191-02	.1507-02	.8980	10.50	548.8
104	1.0000	.80000	22.000	.3260-01	.2700-01	.3640-01	.1277-02	.1057-02	.1425-02	.7980	8.876	547.5

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 89

OH-74 (AEDC V41B-BBA) B62C12F10M16H127E52VBR19

(RVB001)

RUN NUMBER	TRAJ'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T0 BTU/ R F12SEC	H1T01 BTU/ R F12SEC	H1TAM BTU/ R F12SEC	QDOT BTU/ F12SEC	DTWOT DEG. R /SEC	TH DEG. R
104	2.0000	53000	23.000	.1520-01	.1260-01	.1690-01	.5938-03	.4915-03	.6627-03	.3720	4.139	546.3
104	2.0000	56700	24.000	.1050-01	.0800-02	.1180-01	.4142-03	.3429-03	.4622-03	.2600	2.822	545.3
104	2.0000	62000	25.000	.5300-02	.4400-02	.6000-02	.2092-03	.1733-03	.2334-03	.1310	1.428	544.6
104	2.0000	67000	26.000	.2100-02	.1700-02	.2300-02	.8172-04	.6770-04	.9116-04	.5100-01	.5590	543.8
104	2.0000	70500	27.000	.2700-02	.2300-02	.3000-02	.1064-04	.0815-04	.1187-03	.6700-01	.7210	543.5
104	2.0000	75000	28.000	.4000-02	.3300-02	.4400-02	.1354-03	.1287-03	.1733-03	.9800-01	1.074	543.4
104	2.0000	80000	29.000	.3300-02	.2700-02	.3600-02	.1273-03	.1054-03	.1420-03	.8000-01	.8820	544.3
104	2.0000	82400	30.000	.9000-03	.8000-03	.1000-02	.3606-04	.2986-04	.4024-04	.2300-01	.3150	545.3
104	3.0000	82000	31.000	.3240-01	.2680-01	.3620-01	.1270-02	.1049-02	.1419-02	.7880	8.329	551.9
104	3.0000	82500	32.000	.2640-01	.2180-01	.2950-01	.1034-02	.0851-03	.1155-02	.6430	7.173	551.0
104	3.0000	85000	33.000	.2110-01	.1740-01	.2350-01	.8243-03	.6819-03	.9204-03	.5140	5.743	547.8
104	3.0000	87500	34.000	.1700-01	.1410-01	.1900-01	.6667-03	.5518-03	.7441-03	.4170	4.989	547.1
104	3.0000	90000	35.000	.1970-01	.1630-01	.2200-01	.7705-03	.6378-03	.8600-03	.4820	5.953	546.6
104	3.0000	92500	36.000	.2850-01	.2390-01	.3220-01	.1130-02	.9350-03	.1261-02	.7070	8.273	547.2
104	3.0000	95000	37.000	.2450-01	.2030-01	.2740-01	.9597-03	.7942-03	.1071-02	.6000	6.955	547.2
104	3.0000	97500	38.000	.2460-01	.2040-01	.2740-01	.9625-03	.7967-03	.1074-02	.6020	7.053	546.9
104	3.0000	100000	39.000	.2910-01	.2400-01	.3240-01	.1137-02	.9413-03	.1269-02	.7120	8.387	546.3
104	3.0000	102500	40.000	.2720-01	.2250-01	.3040-01	.1066-02	.8819-03	.1190-02	.6660	7.871	548.2
104	3.0000	105000	41.000	.2380-01	.1970-01	.2660-01	.9313-03	.7709-03	.1039-02	.5830	6.657	546.3
104	3.0000	107500	42.000	.1650-01	.1370-01	.1840-01	.6465-03	.5354-03	.7216-03	.4060	4.515	545.4
104	3.0000	110000	43.000	.9000-02	.7400-02	.1000-01	.3504-03	.2902-03	.3909-03	.2260	2.454	543.9
104	3.0000	112500	44.000	.5500-02	.4500-02	.5400-02	.2563-03	.2123-03	.2860-03	.1610	1.890	543.9
104	3.0000	115000	45.000	.5500-02	.4500-02	.5400-02	.2146-03	.1778-03	.2394-03	.1350	1.504	543.7
104	3.0000	117500	46.000	.3100-02	.2600-02	.3500-02	.1224-03	.1014-03	.1365-03	.7700-01	.8370	543.4
104	3.0000	120000	47.000	.2000-02	.1700-02	.2200-02	.7862-04	.6514-04	.8769-04	.5000-01	.5260	542.9
104	3.0000	122500	48.000	.2300-02	.1900-02	.2600-02	.8958-04	.7422-04	.9992-04	.5600-01	.6220	543.0
104	3.0000	125000	49.000	.3400-02	.2800-02	.3800-02	.1331-03	.1103-03	.1485-03	.8400-01	.9100	543.9
104	3.0000	127500	50.000	.2300-02	.1900-02	.2600-02	.9077-04	.7518-04	.1013-03	.5700-01	.6110	544.3
104	3.0000	130000	51.000	.1800-02	.1500-02	.2000-02	.7674-04	.5855-04	.7895-04	.4400-01	.5480	545.1
104	3.0000	132500	52.000	.2200-02	.1800-02	.2400-02	.8533-04	.7053-04	.9525-04	.5300-01	.6600	546.9
104	3.0000	135000	53.000	.3100-02	.2600-02	.3500-02	.1231-03	.1019-03	.1375-03	.7700-01	1.070	547.7
104	3.0000	137500	54.000	.4500-02	.3700-02	.5000-02	.1744-03	.1443-03	.1947-03	.1090	1.424	548.4
104	3.0000	140000	55.000	.5100-02	.4200-02	.5600-02	.1979-03	.1638-03	.2210-03	.1240	1.249	548.2
104	4.0000	142500	56.000	.3340-01	.2760-01	.3740-01	.1308-02	.1080-02	.1462-02	.8080	9.182	554.9
104	4.0000	145000	57.000	.2840-01	.2350-01	.3180-01	.1113-02	.9201-03	.1244-02	.6910	8.552	552.5
104	4.0000	147500	58.000	.2680-01	.2210-01	.2930-01	.1049-02	.8670-03	.1172-02	.6510	7.609	551.5
104	4.0000	150000	59.000	.3260-01	.2690-01	.3640-01	.1274-02	.1054-02	.1473-02	.6740	8.309	550.5
104	4.0000	152500	60.000	.2560-01	.2120-01	.2860-01	.1032-02	.8290-03	.1119-02	.6250	8.175	549.3
104	4.0000	155000	61.000	.2510-01	.2080-01	.2800-01	.9830-03	.8131-03	.1098-02	.6130	8.014	549.1
104	4.0000	157500	62.000	.2200-01	.1820-01	.2460-01	.8526-03	.7138-03	.9629-03	.5390	7.056	547.4
104	4.0000	160000	63.000	.1120-01	.9300-02	.1250-01	.4396-03	.3640-03	.4905-03	.2760	3.612	545.3
104	4.0000	162500	64.000	.7100-02	.5900-02	.7900-02	.2782-03	.2304-03	.3104-03	.1750	2.292	544.0

DATE 07 JUL 75

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 90

04-74 (AEDC V41B-88A) 862C12F10H16M127E32V8R19

(RV8001)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H(ISO) BTU/ R FT2SEC	H(TO) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TM DEG. R
104	4.0000	.45000	62.000	.5300-02	.4400-02	.5900-02	.2078-03	.1721-03	.2318-03	.1310	1.693	543.8
104	4.0000	.47500	63.000	.3800-02	.3200-02	.4300-02	.1499-03	.1242-03	.1672-03	.9400-01	1.201	543.4
104	4.0000	.50000	64.000	.2800-02	.2300-02	.3100-02	.1103-03	.9140-04	.1231-03	.6900-01	.8600	543.4
104	4.0000	.52500	65.000	.2000-02	.1700-02	.2300-02	.8010-04	.6636-04	.8935-04	.5000-01	.6240	543.3
104	4.0000	.55000	66.000	.1200-02	.1000-02	.1400-02	.4799-04	.3976-04	.5353-04	.3000-01	.3540	543.2
104	4.0000	.60000	67.000	.8000-03	.6000-03	.9000-03	.7024-04	.2506-04	.3374-04	.1900-01	.2140	543.3
104	4.0000	.65000	68.000	.1400-02	.1100-02	.1500-02	.5339-04	.4423-04	.5957-04	.3400-01	.3930	544.2
104	4.0000	.70000	69.000	.2000-02	.1600-02	.2200-02	.7792-04	.6454-04	.8693-04	.4900-01	.5460	544.1
104	4.0000	.75000	70.000	.2900-02	.2400-02	.3200-02	.1139-03	.9432-04	.1271-03	.7100-01	.7960	545.1
104	4.0000	.80000	75.000	.1200-02	.1000-02	.1300-02	.4691-04	.3883-04	.5235-04	.2900-01	.3540	545.2
104	4.0000	.87500	77.000	.1300-02	.1100-02	.1400-02	.4931-04	.4131-04	.5571-04	.3100-01	.4090	546.9
104	4.0000	.90000	78.000	.2600-02	.2200-02	.3000-02	.1035-03	.8560-04	.1155-03	.6500-01	.8360	547.8
104	4.0000	.92500	79.000	.4500-02	.3700-02	.5000-02	.1743-03	.1442-03	.1946-03	.1090	1.343	548.7
104	4.0000	.95000	80.000	.5200-02	.4300-02	.5900-02	.2052-03	.1696-03	.2293-03	.1270	1.484	549.0

DATE 07 JUL 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 91

OH-74 (AEDC V41B-BBA) 862C12F10M16H127E52VBR19

(RVB001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LE-SEC /FT ²
52	7.990	20.03	673.0	1335.	-179.7	.1000+00	97.00	.6900-01	3.106	3855.	.6014-04	.7607-07

RUN NUMBER	RN/L	HREF BTU/ R FT ² SEC /FT	STN NO R= .0175 .2341-01
52	2.970	.4348-01	.2341-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H1(9T) BTU/ R FT ² SEC	H1(TO) BTU/ R FT ² SEC	H1(TAW) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTWD DEG. R /SEC	TK DEG. R
52	1.0000	.27500	1.0000	.1340-01	.1110-01	.1490-01	.5814-03	.4831-03	.6471-03	.3820	3.955	544.7
52	1.0000	.30000	2.0000	.1130-01	.0900-02	.1250-01	.4895-03	.4068-03	.5448-03	.3820	3.412	544.3
52	1.0000	.32500	3.0000	.0200-02	.7600-02	.1020-01	.4000-03	.3326-03	.4452-03	.2630	2.705	543.2
52	1.0000	.35000	4.0000	.0900-02	.7900-02	.1060-01	.4126-03	.3431-03	.4592-03	.2720	2.818	542.9
52	1.0000	.37500	5.0000	.0700-02	.7200-02	.0700-02	.3780-03	.3143-03	.4207-03	.2490	2.615	543.3
52	1.0000	.40000	6.0000	.1090-01	.9100-02	.1210-01	.4742-03	.3942-03	.5276-03	.3120	3.207	543.0
52	1.0000	.42500	7.0000	.0920-02	.8300-02	.1100-01	.4315-03	.3588-03	.4802-03	.2840	2.945	543.1
52	1.0000	.45000	8.0000	.1470-01	.1220-01	.1640-01	.6392-03	.5314-03	.7114-03	.4210	4.322	543.3
52	1.0000	.47500	9.0000	.1770-01	.1470-01	.1960-01	.7675-03	.6379-03	.8543-03	.5040	5.128	544.6
52	1.0000	.50000	10.000	.1590-01	.1320-01	.1770-01	.6927-03	.5758-03	.7709-03	.4560	4.616	543.5
52	1.0000	.52500	11.000	.1630-01	.1360-01	.1820-01	.7092-03	.5896-03	.7893-03	.4670	4.725	543.7
52	1.0000	.55000	12.000	.1930-01	.1610-01	.2150-01	.8413-03	.5994-03	.9384-03	.5530	5.553	543.9
52	1.0000	.60000	13.000	.2240-01	.1860-01	.2490-01	.9724-03	.8079-03	.1083-02	.6340	6.451	545.8
52	1.0000	.65000	14.000	.2910-01	.2420-01	.3240-01	.1265-02	.1051-02	.1409-02	.8290	8.390	546.0
52	1.0000	.70000	15.000	.4930-01	.4490-01	.5500-01	.2146-02	.1781-02	.2391-02	1.397	13.61	550.1
52	1.0000	.75000	16.000	.5810-01	.4830-01	.5480-01	.2526-02	.2095-02	.2816-02	1.638	15.51	553.1
52	1.0000	.80000	17.000	.3920-01	.3250-01	.4370-01	.1704-02	.1414-02	.1899-02	1.109	10.70	550.9
52	2.0000	.29500	18.000	.1220-01	.1010-01	.1350-01	.5289-03	.4398-03	.5878-03	.3470	4.071	544.9
52	2.0000	.33700	19.000	.1130-01	.0900-02	.1250-01	.4928-03	.4096-03	.5486-03	.3240	3.815	544.5
52	2.0000	.39000	20.000	.1170-01	.0850-02	.1310-01	.5109-03	.4247-03	.5686-03	.3360	3.962	543.7
52	2.0000	.42600	21.000	.2020-01	.1670-01	.2240-01	.8764-03	.7280-03	.9759-03	.5740	6.720	546.7
52	2.0000	.47900	22.000	.2050-01	.1710-01	.2290-01	.8925-03	.7415-03	.9937-03	.5950	6.517	545.5

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 92

(RVB001)

OH-74 (AEDC V418-B8A) B62C12F10M16H127E52V8R19

RUN NUMBER	TRA/E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R F12SEC	H1T01 BTU/ R F12SEC	H(TAW) BTU/ R F12SEC	QDOT BTU/ F12SEC	DTWOT DEG. R /SEC	TW DEG. R
52	2.0000	.53000	23.000	.2800-01	.2330-01	.3120-01	.1218-02	.1012-02	.1356-02	.7970	8.859	547.4
52	2.0000	.56700	24.000	.3670-01	.3050-01	.4050-01	.1596-02	.1325-02	.1778-02	1.042	11.29	548.9
52	2.0000	.62000	25.000	.6730-01	.5580-01	.7510-01	.2928-02	.2428-02	.2653-02	1.897	20.52	553.6
52	2.0000	.67000	26.000	.5550-01	.4610-01	.6190-01	.2415-02	.2003-02	.2693-02	1.564	16.91	553.9
52	2.0000	.70500	27.000	.3280-01	.2730-01	.3660-01	.1428-02	.1186-02	.1590-02	.9340	10.04	547.1
52	2.0000	.75000	28.000	.1640-01	.1360-01	.1820-01	.7127-03	.5924-03	.7932-03	.4690	5.143	544.0
52	2.0000	.80000	29.000	.1520-01	.1270-01	.1690-01	.6822-03	.5505-03	.7370-03	.4350	4.807	543.5
52	2.0000	.82000	30.000	.5100-02	.4300-02	.5700-02	.2226-03	.1851-03	.2477-03	.1470	2.045	542.3
52	3.0000	.20000	31.000	.2830-01	.2350-01	.3160-01	.1233-02	.1023-02	.1374-02	.8020	8.485	550.5
52	3.0000	.22500	32.000	.2300-01	.1910-01	.2560-01	.1030-02	.8299-03	.1114-02	.6520	7.273	549.9
52	3.0000	.25000	33.000	.1710-01	.1420-01	.1910-01	.7450-03	.6188-03	.8297-03	.4870	5.448	547.3
52	3.0000	.27500	34.000	.1300-01	.1080-01	.1450-01	.5667-03	.4708-03	.6309-03	.3720	4.447	545.7
52	3.0000	.30000	35.000	.1140-01	.9500-02	.1270-01	.4970-03	.4130-03	.5532-03	.3260	4.039	544.6
52	3.0000	.32500	36.000	.1240-01	.1030-01	.1380-01	.5379-03	.4471-03	.5987-03	.3530	4.143	544.5
52	3.0000	.35000	37.000	.1280-01	.1030-01	.1420-01	.5545-03	.4609-03	.6172-03	.3640	4.227	544.3
52	3.0000	.37500	38.000	.1380-01	.1140-01	.1530-01	.5980-03	.4970-03	.6656-03	.3930	4.607	546.1
52	3.0000	.40000	39.000	.2260-01	.1880-01	.2520-01	.9840-03	.8175-03	.1096-02	.6450	7.594	547.6
52	3.0000	.42500	40.000	.2670-01	.2220-01	.2970-01	.1160-02	.9634-03	.1292-02	.7590	8.670	546.4
52	3.0000	.45000	41.000	.2670-01	.2220-01	.2970-01	.1160-02	.9634-03	.1292-02	.7590	8.670	546.4
52	3.0000	.47500	42.000	.3410-01	.2830-01	.3800-01	.1483-02	.1231-02	.1652-02	.9580	10.76	548.7
52	3.0000	.50000	43.000	.4370-01	.3620-01	.4860-01	.1898-02	.1575-02	.2115-02	1.236	13.72	550.4
52	3.0000	.52500	44.000	.6170-01	.5120-01	.6880-01	.2682-02	.2224-02	.2990-02	1.739	20.30	553.1
52	3.0000	.55000	45.000	.7620-01	.6310-01	.8500-01	.3314-02	.2744-02	.3698-02	2.131	23.57	558.4
52	3.0000	.60000	46.000	.4790-01	.3900-01	.5240-01	.2045-02	.1698-02	.2279-02	1.333	14.44	550.0
52	3.0000	.65000	47.000	.2100-01	.1750-01	.2340-01	.9134-03	.7590-03	.1017-02	.6000	6.359	544.9
52	3.0000	.70000	48.000	.1310-01	.1090-01	.1450-01	.5684-03	.4726-03	.6325-03	.3740	4.132	542.8
52	3.0000	.75000	49.000	.1000-01	.8300-02	.1110-01	.4356-03	.3622-03	.4847-03	.2870	3.123	542.4
52	3.0000	.80000	50.000	.8700-02	.7200-02	.9700-02	.3778-03	.3142-03	.4204-03	.2490	2.672	542.2
52	3.0000	.85000	51.000	.1100-01	.9200-02	.1230-01	.4794-03	.3984-03	.5335-03	.3150	3.900	544.2
52	3.0000	.90000	52.000	.1970-01	.1640-01	.2190-01	.8565-03	.7114-03	.9539-03	.5600	6.925	547.2
52	3.0000	.95000	53.000	.8600-02	.7100-02	.9600-02	.3738-03	.3105-03	.4161-03	.2450	3.412	545.0
52	3.0000	.92500	54.000	.1200-01	.9900-02	.1330-01	.5206-03	.4326-03	.5795-03	.3410	4.469	545.2
52	3.0000	.95000	55.000	.3650-01	.3030-01	.4080-01	.1592-02	.1319-02	.1775-02	1.028	11.68	555.5
52	4.0000	.20000	71.000	.2690-01	.2230-01	.3000-01	.1171-02	.9712-03	.1305-02	.7610	8.895	551.7
52	4.0000	.22500	72.000	.2070-01	.1720-01	.2300-01	.8994-03	.7465-03	.1002-02	.5870	6.959	549.4
52	4.0000	.25000	73.000	.1650-01	.1370-01	.1840-01	.7165-03	.5950-03	.7980-03	.4680	5.785	547.4
52	4.0000	.27500	74.000	.1390-01	.1150-01	.1550-01	.6049-03	.5025-03	.6716-03	.3960	5.182	546.9
52	4.0000	.30000	75.000	.1640-01	.1360-01	.1820-01	.7132-03	.5924-03	.7941-03	.4570	6.113	546.6
52	4.0000	.32500	76.000	.2880-01	.2390-01	.3210-01	.1252-02	.1039-02	.1395-02	.8150	10.50	549.7
52	4.0000	.35000	77.000	.4190-01	.3480-01	.4670-01	.1823-02	.1212-02	.2032-02	1.184	15.	551.9
52	4.0000	.40000	80.000	.6040-01	.5010-01	.6740-01	.2628-02	.2178-02	.2931-02	1.697	22.10	555.0
52	4.0000	.42500	81.000	.8020-01	.6630-01	.8960-01	.3487-02	.2894-02	.3894-02	2.228	28.92	562.7

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 93

OH-74 (AEDC V41B-B8A) B62C12F10H16H127E5V8R19 (PVB0011)

RUN NUMBER	TRAJ E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TW DEG. R
52	4.0000	.45000	62.000	.7310-01	.6050-01	.8160-01	.3179-02	.2630-02	.3549-02	2.034	26.11	561.6
52	4.0000	.47500	63.000	.5030-01	.4170-01	.5610-01	.2199-02	.1814-02	.2441-02	1.415	17.92	554.9
52	4.0000	.50000	64.000	.2830-01	.2350-01	.3150-01	.1229-02	.1020-02	.1368-02	.8040	9.934	547.1
52	4.0000	.52500	55.000	.1940-01	.1610-01	.2160-01	.8450-03	.7020-03	.9408-03	.5540	6.849	545.9
52	4.0000	.55000	56.000	.1560-01	.1300-01	.1740-01	.6780-03	.5636-03	.7546-03	.4460	5.227	544.0
52	4.0000	.60000	67.000	.1080-01	.9000-02	.1200-01	.4699-03	.3939-03	.5228-03	.3100	3.491	542.0
52	4.0000	.65000	68.000	.9000-02	.7500-02	.1000-01	.3912-03	.3254-03	.4352-03	.2580	3.031	541.5
52	4.0000	.70000	69.000	.7400-02	.6100-02	.8200-02	.3203-03	.2684-03	.3564-03	.2110	2.357	541.7
52	4.0000	.75000	70.000	.6200-02	.5000-02	.6700-02	.2614-03	.2174-03	.2908-03	.1730	1.925	541.3
52	4.0000	.80000	75.000	.2200-02	.1800-02	.2400-02	.9399-04	.7818-04	.1046-03	.6200-01	.7480	541.2
52	4.0000	.85000	76.000	.3900-02	.3200-02	.4300-02	.1699-03	.1412-03	.1889-03	.1120	1.332	540.7
52	4.0000	.87500	77.000	.5600-02	.4600-02	.6200-02	.2421-03	.2013-03	.2694-03	.1600	2.095	541.9
52	4.0000	.90000	78.000	.9800-02	.8100-02	.1090-01	.4241-03	.3525-03	.4720-03	.2790	3.609	544.4
52	4.0000	.92500	79.000	.7500-02	.6200-02	.8300-02	.3247-03	.2700-03	.3614-03	.2140	2.645	543.5
52	4.0000	.95000	80.000	.2900-02	.2400-02	.3200-02	.1264-03	.1051-03	.1406-03	.8300-01	.9770	542.4

ORBITER FUSELAGE

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
53	7.990	24.87	672.2	1338.	-179.6	.0000	97.20	.6900-01	3.102	3860.	.5993-04	.7824-07

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R F ² SEC	STN NO R= .0175 .2345-01
53	2.956	.4347-01	

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H1(9T) BTU/ R F ² SEC	H1(TO) BTU/ R F ² SEC	H1(TAW) BTU/ R F ² SEC	QDOT BTU/ F ² SEC	OTWOT DEG. R /SEC	TW DEG. R
53	1.0000	.27500	1.0000	.1360-01	.1130-01	.1510-01	.5905-03	.4912-03	.6569-03	.3910	4.052	542.5
53	1.0000	.30000	2.0000	.1180-01	.9800-02	.1320-01	.5141-03	.4277-03	.5719-03	.3400	3.614	542.2
53	1.0000	.32500	3.0000	.9700-02	.8100-02	.1080-01	.4227-03	.3517-03	.4701-03	.2800	2.879	541.5
53	1.0000	.35000	4.0000	.1110-01	.9200-02	.1240-01	.4832-03	.4021-03	.5375-03	.3200	3.323	541.5
53	1.0000	.37500	5.0000	.340-01	.8500-02	.1160-01	.4514-03	.3755-03	.5022-03	.2990	3.142	542.5
53	1.0000	.40000	6.0000	.1150-01	.9700-02	.1290-01	.5056-03	.4206-03	.5624-03	.3350	3.441	542.0
53	1.0000	.42500	7.0000	.1660-01	.1380-01	.1850-01	.7208-03	.5993-03	.8021-03	.4760	4.932	544.0
53	1.0000	.45000	8.0000	.1810-01	.1510-01	.2020-01	.7883-03	.6555-03	.8772-03	.5210	5.322	543.7
53	1.0000	.47500	9.0000	.1770-01	.1470-01	.1970-01	.7705-03	.6406-03	.8574-03	.5090	5.172	544.3
53	1.0000	.50000	10.000	.1900-01	.1590-01	.2110-01	.8252-03	.6861-03	.9183-03	.5440	5.513	544.4
53	1.0000	.52500	11.000	.2110-01	.1750-01	.2340-01	.9158-03	.7612-03	.1019-02	.6030	6.107	545.3
53	1.0000	.55000	12.000	.2390-01	.1990-01	.2650-01	.1040-02	.8647-03	.1158-02	.6850	6.871	545.5
53	1.0000	.60000	13.000	.4070-01	.3380-01	.4530-01	.1767-02	.1457-02	.1968-02	1.157	11.68	549.5
53	1.0000	.65000	14.000	.6780-01	.5620-01	.7550-01	.2946-02	.2442-02	.3284-02	1.913	19.27	554.5
53	1.0000	.70000	15.000	.2830-01	.2350-01	.3150-01	.1228-02	.1020-02	.1368-02	3.635	7.842	549.3
53	1.0000	.75000	16.000	.1250-01	.1040-01	.1400-01	.5455-03	.4534-03	.6072-03	.3590	3.635	545.7
53	1.0000	.80000	17.000	.9400-02	.7800-02	.1050-01	.4097-03	.3405-03	.4550-03	.2700	2.511	545.7
53	2.0000	.29500	18.000	.1410-01	.1170-01	.1550-01	.6110-03	.5084-03	.6776-03	.4050	4.754	541.4
53	2.0000	.33700	19.000	.1340-01	.1110-01	.1490-01	.5809-03	.4834-03	.6461-03	.3950	4.545	541.3
53	2.0000	.39000	20.000	.2030-01	.1690-01	.2260-01	.8830-03	.7343-03	.9825-03	.5830	6.880	543.4
53	2.0000	.42600	21.000	.2360-01	.1960-01	.2630-01	.1028-02	.8542-03	.1144-02	.6780	7.943	544.7
53	2.0000	.47800	22.000	.3220-01	.2510-01	.3360-01	.1314-02	.1092-02	.1462-02	.8650	9.527	545.7

DATE 07 OCT '65

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 95

(RVB001)

OH-74 (AEDC V41B-BBA) B62C12F10H16M127E52V8R19

RUN NO	TRAE	X/L	T/C NO	H/REF R=0.9	H/REF P=1.0	H/REF R-TAW	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	ODOT BTU/ R FT2SEC	DTWOT DEG. R /SEC	TM DEG. R
53	2.0000	.53000	23.000	.6250-01	.5190-01	.6970-01	.2719-02	.2255-02	.3030-02	1.768	19.59	554.0
53	2.0000	.56700	24.000	.7110-01	.5890-01	.7930-01	.3090-02	.2550-02	.3446-02	1.998	21.57	557.4
53	2.0000	.62000	25.000	.2620-01	.2180-01	.2920-01	.1141-02	.9481-03	.1270-02	.7510	8.147	546.4
53	2.0000	.67000	26.000	.1420-01	.1180-01	.1580-01	.6157-03	.5118-03	.6892-03	.4060	4.409	544.9
53	2.0000	.70500	27.000	.1040-01	.8700-02	.1160-01	.4525-03	.3763-03	.5035-03	.2990	3.218	543.6
53	2.0000	.75000	28.000	.8000-02	.6600-02	.8900-02	.3462-03	.2880-03	.3851-03	.2290	2.518	542.0
53	2.0000	.80000	29.000	.6500-02	.5700-02	.7600-02	.2984-03	.2482-03	.3319-03	.1970	2.179	542.5
53	2.0000	.82400	30.000	.2000-02	.1600-02	.2200-02	.7534-04	.7095-04	.9495-04	.5600-01	.7850	543.8
53	3.0000	.20000	31.000	.3030-01	.2510-01	.3370-01	.1315-02	.1092-02	.1465-02	.8610	9.110	549.5
53	3.0000	.22500	32.000	.2540-01	.2110-01	.2830-01	.1104-02	.9171-03	.1229-02	.7260	8.117	546.5
53	3.0000	.25000	33.000	.1920-01	.1600-01	.2140-01	.8359-03	.6951-03	.9301-03	.5520	6.183	543.6
53	3.0000	.27500	34.000	.1500-01	.1250-01	.1670-01	.6534-03	.5436-03	.7267-03	.4330	5.194	541.4
53	3.0000	.30300	35.000	.1320-01	.1100-01	.1470-01	.5727-03	.4766-03	.6369-03	.3800	4.713	540.5
53	3.0000	.32500	36.000	.1390-01	.1150-01	.1540-01	.6031-03	.5018-03	.6707-03	.4000	4.699	540.8
53	3.0000	.35000	37.000	.1550-01	.1230-01	.2850-01	.1720-01	.9593-03	.1240-02	.4460	5.179	541.2
53	3.0000	.37500	38.000	.2560-01	.2130-01	.3680-01	.1143-02	.9266-03	.7476-03	.7360	8.635	543.4
53	3.0000	.40000	39.000	.3300-01	.2750-01	.4460-01	.1739-02	.1445-02	.1937-02	.9460	11.14	545.3
53	3.0000	.42500	40.000	.4000-01	.3320-01	.4460-01	.2334-02	.1938-02	.2600-02	1.528	17.41	549.4
53	3.0000	.45000	41.000	.5370-01	.4450-01	.5980-01	.2953-02	.2448-02	.3293-02	1.915	21.20	555.8
53	3.0000	.47500	42.000	.6790-01	.5630-01	.7570-01	.2953-02	.2448-02	.3293-02	1.915	21.20	555.8
53	3.0000	.50000	43.000	.3040-01	.2630-01	.3380-01	.1321-02	.1098-02	.2848-02	1.660	18.40	554.2
53	3.0000	.52500	44.000	.2190-01	.1820-01	.2440-01	.9540-03	.7929-03	.1562-02	.6390	5.993	545.5
53	3.0000	.55000	45.000	.1270-01	.1050-01	.1410-01	.5501-03	.4575-03	.6121-03	.3540	3.954	541.2
53	3.0000	.57500	46.000	.7900-02	.6600-02	.8900-02	.3435-03	.2859-03	.3822-03	.2280	2.416	542.0
53	3.0000	.60000	47.000	.5900-02	.4900-02	.6500-02	.2545-03	.2119-03	.2832-03	.1630	1.854	541.3
53	3.0000	.62500	48.000	.4000-02	.3300-02	.4400-02	.1732-03	.1442-03	.1926-03	.1150	1.252	540.5
53	3.0000	.65000	49.000	.1700-02	.1400-02	.1900-02	.7535-04	.6211-04	.8462-04	.5000-01	.5370	540.5
53	3.0000	.67500	50.000	.4100-02	.3500-02	.4500-02	.1804-03	.1500-03	.2007-03	.1190	1.475	547.7
53	3.0000	.70000	51.000	.8700-02	.7200-02	.9500-02	.3751-03	.3127-03	.4186-03	.2480	3.068	544.9
53	3.0000	.72500	52.000	.1700-01	.1300-01	.1380-01	.5382-03	.4473-03	.5992-03	.3540	4.925	546.3
53	3.0000	.75000	53.000	.2400-01	.1900-01	.1790-01	.5039-03	.5811-03	.7788-03	.4510	6.014	547.1
53	3.0000	.77500	54.000	.1610-01	.1340-01	.1790-01	.1604-02	.1333-02	.1789-02	1.042	11.64	554.9
53	3.0000	.80000	55.000	.1700-01	.1470-01	.1890-01	.1260-02	.1045-02	.1404-02	.8950	9.643	549.8
53	3.0000	.82500	56.000	.3000-01	.2410-01	.3230-01	.1045-02	.1045-02	.1404-02	.8950	9.643	549.8
53	3.0000	.85000	57.000	.2190-01	.1810-01	.2430-01	.9481-03	.7875-03	.1056-02	.6230	7.287	547.5
53	3.0000	.87500	58.000	.2190-01	.1810-01	.2430-01	.9481-03	.7875-03	.1056-02	.6230	7.287	547.5
53	3.0000	.90000	59.000	.1540-01	.1290-01	.1710-01	.6686-03	.5550-03	.7419-03	.4420	5.791	546.0
53	3.0000	.92500	60.000	.1540-01	.1290-01	.1710-01	.6686-03	.5550-03	.7419-03	.4420	5.791	546.0
53	3.0000	.95000	61.000	.2810-01	.2330-01	.3120-01	.1219-02	.1045-02	.1404-02	.8950	9.643	549.8
53	3.0000	.97500	62.000	.4920-01	.4000-01	.5370-01	.2096-02	.1740-02	.2336-02	1.358	17.86	551.6
53	3.0000	.37500	59.000	.6460-01	.5350-01	.7210-01	.2810-02	.2339-02	.3134-02	1.820	23.70	556.5
53	3.0000	.40000	60.000	.4300-01	.3570-01	.4790-01	.1871-02	.1553-02	.2084-02	1.222	15.95	550.9
53	3.0000	.42500	61.000	.2460-01	.2040-01	.2730-01	.1057-02	.8870-03	.1189-02	.7020	9.191	545.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 96

RVB(01)

OH-74 (AEDC V41B-B8A) B62C12F10H16W127E52V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(14W) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTADT DEG. R /SEC	TH DEG. R
53	4.0000	.45000	62.000	.1510-01	.1260-01	.1680-01	.6568-03	.5461-03	.7309-03	.4330	5.613	544.3
53	4.0000	.47500	63.000	.1150-01	.9500-02	.1280-01	.5018-03	.4173-03	.5583-03	.3320	4.221	543.5
53	4.0000	.50000	64.000	.9000-02	.7400-02	.1000-01	.3893-03	.3238-03	.4331-03	.2580	3.190	542.7
53	4.0000	.52500	65.000	.7000-02	.5800-02	.7800-02	.3055-03	.2541-03	.3398-03	.2020	2.505	542.3
53	4.0000	.55000	66.000	.5700-02	.4700-02	.6400-02	.2482-03	.2065-03	.2761-03	.1640	1.929	542.1
53	4.0000	.60000	67.000	.4200-02	.3500-02	.4700-02	.1833-03	.1525-03	.2038-03	.1220	1.370	540.8
53	4.0000	.65000	68.000	.3400-02	.2800-02	.3700-02	.1459-03	.1214-03	.1623-03	.9700-01	1.138	540.6
53	4.0000	.70000	69.000	.2100-02	.1800-02	.2400-02	.9215-04	.7669-04	.1025-03	.5100-01	.6820	540.6
53	4.0000	.75000	70.000	.1200-02	.1000-02	.1400-02	.5301-04	.4413-04	.5895-04	.3500-01	.3930	539.6
53	4.0000	.80000	75.000	.1100-02	.9000-03	.1200-02	.4647-04	.3667-04	.5167-04	.3150-01	.3720	540.3
53	4.0000	.85000	76.000	.8000-03	.7000-03	.9000-03	.3424-04	.2850-04	.3807-04	.2300-01	.2700	538.5
53	4.0000	.87500	77.000	.2800-02	.2300-02	.3100-02	.1219-03	.1014-03	.1356-03	.8100-01	1.061	540.8
53	4.0000	.90000	78.000	.5200-02	.4300-02	.5800-02	.2264-03	.1883-03	.2518-03	.1500	1.943	542.2
53	4.0000	.92500	79.000	.6900-02	.5700-02	.7600-02	.2983-03	.2481-03	.3318-03	.1970	2.446	542.3
53	4.0000	.95000	80.000	.6300-02	.5300-02	.7000-02	.2745-03	.2283-03	.3053-03	.1820	2.130	542.8

(RV8001)

OH-74 (AEDC V41B-BBA) 862C12F10M16H127E52VBR19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
54	7.950	29.89	675.3	1340.	-179.6	.0000	97.30	.7000-01	3.1116	3862.	.6012-04	.7836-07

RUN NUMBER	RN/L	REF	STN NO
54	1.0000	BTU/ R	R=
54	2.963	FT2SEC	.0175
54			.2342-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAW	M(10) BTU/ R FT2SEC	M(10) BTU/ R FT2SEC	M(10) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TW DEG. R
54	1.0000	.27500	1.0000	.1450-01	.1210-01	.1620-01	.6330-03	.5266-03	.7041-03	.4200	4.355	542.6
54	1.0070	.30000	2.0000	.1220-01	.1010-01	.1350-01	.5299-03	.4408-03	.5894-03	.3510	3.731	542.7
54	1.0000	.32500	3.0000	.1130-01	.0940-02	.1260-01	.4933-03	.4105-03	.5487-03	.3280	3.365	542.0
54	1.0000	.35000	4.0000	.1140-01	.0900-02	.1270-01	.4974-03	.4139-03	.5532-03	.3300	3.425	542.1
54	1.0000	.37500	5.0000	.1170-01	.0900-02	.1300-01	.5100-03	.4243-03	.5674-03	.3380	3.554	543.1
54	1.0000	.40000	6.0000	.1920-01	.1600-01	.2140-01	.8380-03	.6970-03	.9324-03	.5550	5.696	544.0
54	1.0000	.42500	7.0000	.1790-01	.1490-01	.1990-01	.7798-03	.6484-03	.8677-03	.5160	5.341	544.7
54	1.0000	.45000	8.0000	.1900-01	.1580-01	.2110-01	.8265-03	.6872-03	.9197-03	.5460	5.582	544.8
54	1.0000	.47500	9.0000	.1730-01	.1440-01	.1930-01	.7542-03	.6271-03	.8393-03	.4990	5.071	544.8
54	1.0000	.50000	10.000	.2330-01	.1910-01	.2560-01	.1003-02	.8339-03	.1116-02	.6620	6.700	545.9
54	1.0000	.52500	11.000	.2660-01	.2210-01	.2960-01	.1159-02	.9635-03	.1291-02	.7640	7.725	547.1
54	1.0000	.55000	12.000	.3380-01	.2800-01	.3760-01	.1471-02	.1222-02	.1638-02	.9590	9.709	547.3
54	1.0000	.60000	13.000	.3300-01	.2740-01	.3670-01	.1438-02	.1194-02	.1522-02	.9430	9.520	548.1
54	1.0000	.65000	14.000	.2560-01	.2120-01	.2850-01	.1115-02	.9259-03	.1241-02	.7330	7.409	546.9
54	1.0000	.70000	15.000	.2140-01	.1780-01	.2390-01	.9321-03	.7746-03	.1032-02	.6140	5.994	544.5
54	1.0000	.75000	16.000	.9500-02	.7800-02	.1050-01	.4146-03	.3447-03	.4613-03	.2740	2.776	544.5
54	1.0000	.80000	17.000	.3800-02	.3100-02	.4200-02	.1538-03	.1362-03	.1822-03	1.090	1.050	544.0
54	2.0000	.85000	18.000	.1510-01	.1250-01	.1670-01	.6562-03	.5459-03	.7209-03	.4350	5.109	542.5
54	2.0000	.90000	19.000	.1250-01	.1040-01	.1390-01	.5441-03	.4527-03	.6032-03	.3610	4.263	542.0
54	2.0000	.95000	20.000	.2470-01	.2050-01	.2750-01	.1106-02	.8951-03	.1193-02	.7120	8.393	544.4
54	2.0000	.42600	21.000	.2620-01	.2190-01	.2920-01	.1142-02	.9491-03	.1271-02	.7530	8.815	546.8
54	2.0000	.47800	22.000	.4230-01	.3520-01	.4720-01	.1845-02	.1532-02	.2055-02	1.211	13.46	549.5

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 98

(RV8001)

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

RUN NUMBER	TRAJ.E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TA1 BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG R
54	2.0000	.53000	23.000	.3380-01	.2810-01	.3770-01	.1474-02	.1224-02	.1642-02	.9680	10.76	549.3
54	2.0000	.56700	24.000	.2110-01	.1760-01	.2350-01	.9209-03	.7653-03	.1025-02	.6079	6.592	546.7
54	2.0000	.62000	25.000	.1390-01	.1150-01	.1540-01	.6040-03	.5023-03	.6721-03	.4000	4.342	544.5
54	2.0000	.67000	26.000	.9100-02	.7600-02	.1010-01	.3961-03	.3295-03	.4406-03	.2630	2.856	542.9
54	2.0000	.70500	27.000	.7600-02	.6300-02	.8400-02	.3303-03	.2749-03	.3674-03	.2190	2.353	542.0
54	2.0000	.75000	28.000	.4700-02	.3900-02	.5200-02	.2052-03	.1708-03	.2282-03	.1360	1.499	541.4
54	2.0000	.80000	29.000	.2600-02	.2200-02	.2900-02	.1147-03	.9542-04	.1275-03	.7600-01	.8410	542.1
54	2.0000	.82400	30.000	.1000-02	.8000-03	.1100-02	.4374-04	.3638-04	.4865-04	.2900-01	.4040	543.1
54	3.0000	.20000	31.000	.3140-01	.2610-01	.3490-01	.1368-02	.1135-02	.1523-02	.8960	9.480	550.4
54	3.0000	.28000	32.000	.2640-01	.2190-01	.2940-01	.1150-02	.9553-03	.1280-02	.7570	8.459	547.5
54	3.0000	.25000	33.000	.2020-01	.1680-01	.2250-01	.8798-03	.7315-03	.9790-03	.5820	6.509	544.3
54	3.0000	.27500	34.000	.1570-01	.1310-01	.1750-01	.6850-03	.5699-03	.7620-03	.4540	5.447	542.5
54	3.0000	.30000	35.000	.1380-01	.1140-01	.1530-01	.5995-03	.4989-03	.6668-03	.3980	4.935	541.7
54	3.0000	.32500	36.000	.1470-01	.1230-01	.1640-01	.6428-03	.5349-03	.7149-03	.4270	5.013	541.7
54	3.0000	.35000	37.000	.2480-01	.2060-01	.2760-01	.1080-02	.8979-03	.1201-02	.7150	8.301	543.5
54	3.0000	.37500	38.000	.3300-01	.2750-01	.3680-01	.1440-02	.1197-02	.1602-02	.9510	11.14	545.7
54	3.0000	.40000	39.000	.2870-01	.2380-01	.3190-01	.1249-02	.1038-02	.1390-02	.8240	9.709	546.0
54	3.0000	.42500	40.000	.3000-01	.2490-01	.3340-01	.1308-02	.1087-02	.1456-02	.8620	10.20	547.0
54	3.0000	.45000	41.000	.3740-01	.3110-01	.4160-01	.1630-02	.1354-02	.1815-02	1.072	12.23	548.2
54	3.0000	.47500	42.000	.2460-01	.2040-01	.2740-01	.1072-02	.8911-03	.1193-02	.7080	7.874	545.9
54	3.0000	.50000	43.000	.2030-01	.1690-01	.2260-01	.8848-03	.7355-03	.9848-03	.5840	6.501	545.9
54	3.0000	.52500	44.000	.1390-01	.1150-01	.1540-01	.6045-03	.5028-03	.6725-03	.4000	4.695	543.7
54	3.0000	.55000	45.000	.1110-01	.9200-02	.1230-01	.4827-03	.4015-03	.5370-03	.3200	3.563	543.4
54	3.0000	.57500	46.000	.7100-02	.5900-02	.7900-02	.3091-03	.2572-03	.3438-03	.2050	2.234	541.7
54	3.0000	.60000	47.000	.4900-02	.4100-02	.5500-02	.2145-03	.1785-03	.2385-03	.1430	1.515	541.2
54	3.0000	.62500	48.000	.3300-02	.2800-02	.3700-02	.1456-03	.1212-03	.1619-03	.9700-01	1.071	540.3
54	3.0000	.65000	49.000	.1600-02	.1300-02	.1800-02	.6935-04	.5774-04	.7710-04	.4600-01	.5030	539.7
54	3.0000	.67500	50.000	.1700-02	.1400-02	.1800-02	.7208-04	.6000-04	.8015-04	.4800-01	.5150	540.5
54	3.0000	.69500	51.000	.1800-02	.1500-02	.2000-02	.7659-04	.6546-04	.8754-04	.5200-01	.6460	543.2
54	3.0000	.71500	52.000	.2400-02	.2000-02	.2700-02	.1051-03	.8741-04	.1169-03	.7000-01	.8610	543.8
54	3.0000	.73500	53.000	.3600-02	.3000-02	.4000-02	.1566-03	.1302-03	.1742-03	.1040	1.443	544.2
54	3.0000	.75500	54.000	.4400-02	.3700-02	.4900-02	.1934-03	.1608-03	.2152-03	.1280	1.677	544.2
54	3.0000	.77500	55.000	.3400-02	.2800-02	.3800-02	.1492-03	.1241-03	.1660-03	.9900-01	1.002	543.2
54	3.0000	.79500	56.000	.3600-01	.3050-01	.4090-01	.1603-02	.1327-02	.1784-02	1.942	11.84	555.0
54	3.0000	.81500	57.000	.2730-01	.2250-01	.3040-01	.1188-02	.9868-03	.1324-02	.7800	9.113	550.0
54	3.0000	.83500	58.000	.2050-01	.1700-01	.2290-01	.8932-03	.7421-03	.9943-03	.5980	6.883	547.6
54	3.0000	.85500	59.000	.2100-01	.1740-01	.2330-01	.9135-03	.7591-03	.1017-02	.6020	7.439	547.0
54	3.0000	.87500	60.000	.2080-01	.1730-01	.2310-01	.9056-03	.7528-03	.1018-02	.5980	7.626	545.9
54	3.0000	.89500	61.000	.3760-01	.3120-01	.4190-01	.1640-02	.1322-02	.1826-02	1.076	14.06	549.9
54	3.0000	.91500	62.000	.3680-01	.3220-01	.4320-01	.1691-02	.1403-02	.1883-02	1.107	14.45	551.5
54	3.0000	.93500	63.000	.2270-01	.1890-01	.2530-01	.9891-03	.8222-03	.1101-02	.6530	8.548	545.9
54	3.0000	.95500	64.000	.1970-01	.1550-01	.2080-01	.8139-03	.6755-03	.9059-03	.5370	7.035	545.8
54	3.0000	.97500	65.000	.3000-01	.1080-01	.1450-01	.5677-03	.4721-03	.6315-03	.3760	4.927	543.7

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 99

OH-74 (AEDC V41B-BBA) B62C12F10M16H127E52V8R19 (RV8001)

RUN NUMBER	TRA.F	K'L	T/C NO	4/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(GTO) BTU/R FT2SEC	H(TO) BTU/R FT2SEC	H(TAH) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TH DEG. R
54	4.0000	.45000	62.000	.8400-02	.7000-02	.9300-02	.3649-03	.3036-03	.4059-03	.2420	3.137	542.8
54	4.0000	.47500	63.000	.6300-02	.5200-02	.7000-02	.2744-03	.2283-03	.3052-03	.1920	2.321	542.2
54	4.0000	.50000	64.000	.4700-02	.3900-02	.5200-02	.2031-03	.1690-03	.2259-03	.1350	1.672	541.7
54	4.0000	.52500	65.000	.4400-02	.3700-02	.4900-02	.1923-03	.1600-03	.2139-03	.1280	1.583	541.7
54	4.0000	.55000	66.000	.3200-02	.2700-02	.3600-02	.1404-03	.1169-03	.1562-03	.7300-01	1.097	541.0
54	4.0000	.60000	67.000	.2400-02	.2000-02	.2700-02	.1056-03	.8793-04	.1175-03	.7000-01	.7530	540.3
54	4.0000	.65000	68.000	.1400-02	.1200-02	.1600-02	.6227-04	.5185-04	.6924-04	.4100-01	.4880	539.8
54	4.0000	.70000	69.000	.7000-03	.6000-03	.8000-03	.3220-04	.2681-04	.3980-04	.2100-01	.2390	539.8
54	4.0000	.75000	70.000	.1000-02	.9000-03	.1200-02	.4574-04	.3809-04	.5085-04	.3000-01	.3410	539.3
54	4.0000	.80000	71.000	.1100-02	.9000-03	.1200-02	.4711-04	.3921-04	.5228-04	.3100-01	.3780	540.5
54	4.0000	.85000	72.000	.1500-02	.1300-02	.1700-02	.6690-04	.5569-04	.7438-04	.4500-01	.5290	539.9
54	4.0000	.87500	73.000	.1700-02	.1400-02	.1900-02	.7592-04	.6318-04	.8443-04	.5000-01	.6620	541.1
54	4.0000	.90000	74.000	.1700-02	.1400-02	.1900-02	.7535-04	.6271-04	.8381-04	.5000-01	.6490	541.7
54	4.0000	.92500	75.000	.2200-02	.1900-02	.2500-02	.9759-04	.8121-04	.1085-03	.6500-01	.8040	541.4
54	4.0000	.95000	80.000	.1600-02	.1300-02	.1700-02	.6818-04	.5673-04	.7584-04	.4500-01	.5310	542.3

DATE 07 OCT 76

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 100

(RVE001)

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
55	7.930	34.95	674.3	134.1	-179.6	.0000	97.40	.7000-01	3.112	3864.	.5998-04	.7842-07

RUN NUMBER	RN/L X10 ⁶ /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175 .2345-01
55	2.95E	4356-01	

TEST DATA

RUN NUMBER	TRA	X/L	1/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT ² SEC	H(10) BTU/ R FT ² SEC	H(14W) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTWDT DEG. R /SEC	TM DEG. R
55	1.0000	.27500	1.000	.1570-01	.1270-01	.1700-01	.6653-03	.5635-03	.7401-03	.4420	4.577	543.2
55	1.0000	.30000	2.000	.1330-01	.1110-01	.1480-01	.5794-03	.4820-03	.6445-03	.3850	4.081	543.2
55	0.500	.32500	3.000	.1070-01	.8900-02	.1190-01	.4650-03	.3869-03	.5173-03	.3090	3.172	542.9
55	1.0000	.35000	4.000	.1210-01	.1000-01	.1340-01	.5257-03	.4373-03	.5347-03	.3490	3.618	543.0
55	1.0000	.37500	5.000	.1740-01	.1450-01	.1940-01	.7597-03	.6317-03	.8453-03	.5030	4.283	544.9
55	1.0000	.40000	6.000	.2010-01	.1670-01	.2240-01	.6753-03	.7287-03	.9751-03	.5800	5.952	544.7
55	1.0000	.42500	7.000	.1410-01	.1170-01	.1570-01	.6139-03	.5106-03	.6831-03	.4070	4.212	544.7
55	1.0000	.45000	8.000	.1990-01	.1650-01	.2210-01	.8655-03	.7196-03	.9631-03	.5730	5.848	545.3
55	1.0000	.47500	9.000	.2280-01	.1960-01	.2540-01	.9939-03	.8260-03	.9345-03	.6560	6.663	546.9
55	1.0000	.50000	10.000	.1930-01	.1600-01	.2150-01	.8397-03	.6981-03	.9345-03	.8200	8.296	547.0
55	1.0000	.52500	11.000	.2850-01	.2370-01	.3300-01	.1292-02	.1073-02	.1138-02	.9520	8.539	547.1
55	1.0000	.55000	12.000	.2970-01	.2460-01	.3300-01	.1027-02	.8322-03	.1115-02	.6600	6.071	547.9
55	1.0000	.57500	13.000	.2300-01	.1910-01	.2560-01	.1001-02	.8537-03	.1144-02	.6770	5.845	547.7
55	1.0000	.60000	14.000	.2360-01	.1960-01	.2630-01	.3417-03	.2842-03	.3901-03	.2260	2.213	544.0
55	1.0000	.62500	15.000	.7800-02	.6500-02	.8700-02	.3700-02	.1467-03	.1631-03	.9700-01	.9870	542.8
55	1.0000	.65000	16.000	.3400-02	.2800-02	.3700-02	.8944-04	.7440-04	.9849-04	.5900-01	5750	543.3
55	1.0000	.67500	17.000	.2100-02	.1700-02	.2300-02	.6870-03	.5715-03	.7642-03	.4560	5.349	543.2
55	1.0000	.70000	18.000	.1580-01	.1310-01	.1750-01	.6870-03	.5284-03	.7065-03	.4220	4.971	543.2
55	1.0000	.72500	19.000	.1460-01	.1210-01	.1620-01	.6351-03	.5284-03	.7065-03	.4220	4.971	543.2
55	1.0000	.75000	20.000	.2430-01	.2020-01	.2710-01	.1059-02	.8810-03	.1179-02	.7010	8.259	545.2
55	1.0000	.77500	21.000	.2340-01	.1940-01	.2600-01	.1018-02	.8464-03	.1133-02	.6730	7.885	545.8
55	1.0000	.80000	22.000	.2450-01	.2040-01	.2730-01	.1069-02	.8888-03	.1130-02	.7060	7.854	545.6

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-74 (ACDC V41B-BBA) B62C12F10H16W127E52VBR19

(RVB0011)

RUN NUMBER	TRA E	X/L	T/C	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1AH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TW DEG. R
55	2.0000	.53000	23.000	.2690-01	.2230-01	.2990-01	.1172-02	.9735-03	.1304-02	.7720	8.580	548.1
55	2.0000	.55700	24.000	.1710-01	.1420-01	.1900-01	.7444-03	.6189-03	.8284-03	.4920	5.344	545.7
55	2.0000	.62000	25.000	.1200-01	.9900-02	.1330-01	.5207-03	.4331-03	.5794-03	.3450	3.750	544.2
55	2.0000	.67000	26.000	.6300-02	.5000-02	.6700-02	.2616-03	.2910-03	.2910-03	.1740	1.888	543.0
55	2.0000	.70500	27.000	.4100-02	.3400-02	.4500-02	.1772-03	.1474-03	.1970-03	.1100	1.270	541.7
55	2.0000	.75000	28.000	.2000-02	.1600-02	.2200-02	.3575-04	.7139-04	.9535-04	.5700-01	.6280	540.6
55	2.0000	.80000	29.000	.2000-02	.1600-02	.2200-02	.8494-04	.7070-04	.9446-04	.5700-01	.6240	541.4
55	2.0000	.82400	30.000	.8000-03	.7000-03	.9000-03	.3618-04	.3010-04	.4024-04	.2400-01	.3350	542.4
55	3.0000	.20000	31.000	.3190-01	.2650-01	.3550-01	.1389-02	.1153-02	.1547-02	.9110	9.626	551.2
55	3.0000	.22500	32.000	.2760-01	.2290-01	.3070-01	.1202-02	.9985-03	.1338-02	.7910	8.841	548.3
55	3.0000	.25000	33.000	.2980-01	.1730-01	.2320-01	.9073-03	.7543-03	.1010-02	.6000	6.712	545.6
55	3.0000	.27500	34.000	.1590-01	.1320-01	.1760-01	.6905-03	.5744-03	.7681-03	.5480	5.490	543.4
55	3.0000	.30000	35.000	.1320-01	.1120-01	.1470-01	.5771-03	.4802-03	.6418-03	.3940	4.753	542.0
55	3.0000	.32500	36.000	.1960-01	.1630-01	.2180-01	.8526-03	.7092-03	.3494-03	.5560	6.533	543.5
55	3.0000	.35000	37.000	.2870-01	.2380-01	.3190-01	.1249-02	.1039-02	.1390-02	.9270	9.587	545.0
55	3.0000	.37500	38.000	.2610-01	.2170-01	.2900-01	.1137-02	.9453-03	.1265-02	.7520	8.815	545.2
55	3.0000	.40000	39.000	.2010-01	.1570-01	.2230-01	.8749-03	.7276-03	.9735-03	.5900	6.831	544.4
55	3.0000	.42500	40.000	.3440-01	.2860-01	.3630-01	.1498-02	.1245-02	.1668-02	.9950	11.56	543.6
55	3.0000	.45000	41.000	.2470-01	.2050-01	.2750-01	.1075-02	.8941-03	.1197-02	.7110	8.121	545.4
55	3.0000	.47500	42.000	.2410-01	.2000-01	.2680-01	.1050-02	.8725-03	.1168-02	.6930	7.709	545.7
55	3.0000	.50000	43.000	.1890-01	.1570-01	.2100-01	.8235-03	.6847-03	.9164-03	.5450	6.063	545.5
55	3.0000	.52500	44.000	.1130-01	.9400-02	.1250-01	.4908-03	.4083-03	.5460-03	.3260	3.820	543.4
55	3.0000	.55000	45.000	.9100-02	.7500-02	.1010-01	.3951-03	.3287-03	.4395-03	.2620	2.925	542.8
55	3.0000	.60000	46.000	.5900-02	.4900-02	.6500-02	.2551-03	.2123-03	.2837-03	.1700	1.847	541.5
55	3.0000	.65000	47.000	.3900-02	.3300-02	.4400-02	.1708-03	.1422-03	.1899-03	.1140	1.210	540.5
55	3.0000	.70000	48.000	.1800-02	.1500-02	.2000-02	.7817-04	.5509-04	.8691-04	.5200-01	.5760	533.8
55	3.0000	.75000	49.000	.1900-02	.1600-02	.2100-02	.8414-04	.7005-04	.9354-04	.5600-01	.6110	533.9
55	3.0000	.80000	50.000	.1500-02	.1300-02	.1800-02	.6827-04	.5767-04	.7702-04	.4600-01	.4950	541.5
55	3.0000	.85000	51.000	.1300-02	.1100-02	.1400-02	.5569-04	.4634-04	.5195-04	.3700-01	.4580	542.7
55	3.0000	.97500	52.000	.1500-02	.1200-02	.1600-02	.6394-04	.5319-04	.7112-04	.4200-01	.5260	543.0
55	3.0000	.92000	53.000	.1400-02	.1200-02	.1600-02	.6130-04	.5099-04	.6818-04	.4700-01	.5070	543.2
55	3.0000	.95000	54.000	.1500-02	.1300-02	.1700-02	.6710-04	.5582-04	.7465-04	.4500-01	.5340	543.3
55	3.0000	.95000	55.000	.2500-02	.2100-02	.2700-02	.1073-03	.8955-04	.1197-03	.7100-01	.7240	542.9
55	4.0000	.20000	71.000	.7520-01	.2920-01	.3920-01	.1533-02	.1271-02	.1792-02	.9920	11.25	555.4
55	4.0000	.22500	72.000	.2050-01	.2210-01	.2970-01	.1160-02	.9635-03	.1292-02	.7630	8.905	553.3
55	4.0000	.25000	73.000	.2130-01	.1770-01	.2370-01	.9259-03	.7692-03	.1031-02	.6120	7.134	549.3
55	4.0000	.27500	74.000	.2430-01	.2020-01	.2700-01	.1059-02	.8789-03	.1178-02	.5070	8.511	547.9
55	4.0000	.30000	75.000	.2450-01	.2040-01	.2730-01	.1067-02	.8870-03	.1118-02	.7050	9.226	546.4
55	4.0000	.32500	76.000	.3230-01	.2680-01	.3600-01	.1169-02	.1566-02	.1566-02	.9850	12.09	549.1
55	4.0000	.35000	77.000	.2240-01	.1860-01	.2490-01	.1406-02	.1169-02	.1566-02	.8440	8.426	546.5
55	4.0000	.37500	78.000	.2280-01	.1890-01	.2530-01	.9913-03	.8241-03	.1103-02	.6550	8.575	545.2
55	4.0000	.40000	79.000	.1760-01	.1460-01	.1950-01	.7544-03	.5356-03	.8509-03	.5060	6.624	545.3
55	4.0000	.42500	80.000	.1030-01	.8500-02	.1140-01	.4471-03	.3713-03	.4973-03	.2970	3.889	543.4

DATE 07 OCT 75

04-74 (AEDC V41B-13A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 102

04-74 (AEDC V41B-88A) B62C12F10M16M127E52V8R19

(RVB0011)

RUN NUMBER	TRA/E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(970) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(141) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	IN DEG. R
55	4.0000	.45000	62.000	.6900-02	.5700-02	.7500-02	.2991-03	.2489-03	.3327-03	.1990	2.579	542.2
55	4.0000	.47500	63.000	.5300-02	.4400-02	.5900-02	.2323-03	.1933-03	.2583-03	.1550	1.969	541.7
55	4.0000	.50000	64.000	.4400-02	.3700-02	.4900-02	.1929-03	.1605-03	.2145-03	.1280	1.591	541.2
55	4.0000	.52500	65.000	.3500-02	.2900-02	.3900-02	.1510-03	.1257-03	.1679-03	.1010	1.246	541.1
55	4.0000	.55000	66.000	.3200-02	.2600-02	.3500-02	.1375-03	.1145-03	.1529-03	.9200-01	1.076	540.9
55	4.0000	.60000	67.000	.1500-02	.1200-02	.1600-02	.6344-04	.5282-04	.7053-04	.4200-01	.4770	539.7
55	4.0000	.65000	68.000	.7000-03	.6000-03	.8000-03	.3128-04	.2605-04	.3477-04	.2100-01	.2460	539.0
55	4.0000	.70000	69.000	.1200-02	.1000-02	.1300-02	.5107-04	.4252-04	.5678-04	.3400-01	.3800	540.0
55	4.0000	.75000	70.000	.1300-02	.1100-02	.1400-02	.5642-04	.4698-04	.6272-04	.3800-01	.4200	539.6
55	4.0000	.80000	75.000	.6000-03	.5000-03	.7000-03	.2575-04	.2143-04	.2862-04	.1700-01	.2070	540.3
55	4.0000	.87500	77.000	.1200-02	.1000-02	.1300-02	.5097-04	.4241-04	.5667-04	.3400-01	.4460	540.8
55	4.0000	.90000	78.000	.1200-02	.1000-02	.1400-02	.5409-04	.4502-04	.6015-04	.3600-01	.4670	541.2
55	4.0000	.92500	79.000	.1400-02	.1100-02	.1500-02	.6001-04	.4995-04	.6674-04	.4000-01	.4950	541.3
55	4.0000	.95000	80.000	.1600-02	.1300-02	.1700-02	.6818-04	.5673-04	.7584-04	.4500-01	.5310	542.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 103

ORBITER FUSELAGE

OH-74 (AEDC V41B-B8A) B62C12F10M16H127E52V8P19

(RVB0011)

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
56	7.990	39.91	673.2	134.1	-173.6	-1000+00	97.40	.7000-01	3.107	3864.	.5988-04	.7842-07

RUN NUMBER	RN/L X10 ⁶ /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175 .2347-01
56	2.951	.4352-01	.2347-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1GTO1 BTU/ R FT ² SEC	H1TO1 BTU/ R FT ² SEC	H1TAH BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTADT DEG. R /SEC	TH DEG. R
56	1.0000	.27500	1.0000	.1490-01	.1240-01	.1660-01	.6475-03	.5387-03	.7204-03	.4300	4.452	543.6
56	1.0000	.30000	2.0000	.1320-01	.1100-01	.1470-01	.5747-03	.4780-03	.6394-03	.3810	4.042	543.9
56	1.0000	.32500	3.0000	.1070-01	.0900-02	.1190-01	.4672-03	.3886-03	.5197-03	.3100	3.183	543.4
56	1.0000	.35000	4.0000	.1730-01	.1440-01	.1920-01	.7529-03	.6262-03	.8376-03	.4990	5.172	544.0
56	1.0000	.37500	5.0000	.1640-01	.1360-01	.1820-01	.7133-03	.5931-03	.7937-03	.4720	4.958	545.0
56	1.0000	.40000	6.0000	.1700-01	.1410-01	.1890-01	.7401-03	.6155-03	.8234-03	.4900	5.031	544.6
56	1.0000	.42500	7.0000	.1710-01	.1420-01	.1900-01	.7446-03	.6191-03	.8286-03	.4930	5.102	545.2
56	1.0000	.45000	8.0000	.2610-01	.2170-01	.2910-01	.1138-02	.9457-03	.1265-02	.7510	7.670	546.4
56	1.0000	.47500	9.0000	.2500-01	.1700-01	.2280-01	.8919-03	.7414-03	.9927-03	.5890	5.985	546.4
56	1.0000	.50000	10.0000	.2430-01	.1850-01	.2480-01	.9705-03	.8068-03	.1090-02	.6410	6.489	546.0
56	1.0000	.52500	11.0000	.3340-01	.2770-01	.3720-01	.1453-02	.1209-02	.1617-02	.7300	9.690	547.3
56	1.0000	.55000	12.0000	.2540-01	.2110-01	.2830-01	.1105-02	.9194-03	.1231-02	.7300	7.318	546.8
56	1.0000	.57500	13.0000	.2340-01	.1950-01	.2610-01	.1020-02	.8472-03	.1135-02	.6720	6.790	548.0
56	1.0000	.60000	14.0000	.1920-01	.1640-02	.2900-02	.1143-03	.5026-04	.1271-03	.7500-01	2.555	544.7
56	1.0000	.62500	15.0000	.2600-02	.2200-02	.2900-02	.1018-03	.8469-04	.1132-03	.6800-01	.7420	542.9
56	1.0000	.65000	16.0000	.2300-02	.1900-02	.2400-02	.1018-03	.8469-04	.1132-03	.6800-01	.6850	542.2
56	1.0000	.67500	17.0000	.2200-02	.1800-02	.2400-02	.9372-04	.7797-04	.1042-03	.6200-01	.6030	542.8
56	1.0000	.70000	18.0000	.1530-01	.1270-01	.1700-01	.6651-03	.5532-03	.7379-03	.4410	5.174	543.6
56	2.0000	.72500	19.0000	.2000-01	.1560-01	.2220-01	.8599-03	.7233-03	.9679-03	.5760	6.785	544.9
56	2.0000	.75000	20.0000	.1930-01	.1600-01	.2150-01	.8335-03	.6982-03	.9342-03	.5560	6.550	544.8
56	2.0000	.77500	21.0000	.3300-01	.2740-01	.3670-01	.1435-02	.1192-02	.1597-02	.9460	11.07	547.8
56	2.0000	.80000	22.0000	.2870-01	.2380-01	.3190-01	.1243-02	.1037-02	.1389-02	.8240	9.171	545.4

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 104

(RVE001)

OH-74 (AEDC V41B-88A) B62C12F10M16H127E52V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAW BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DT4OT DEG. R /SEC	TH DEG. R
56	2.0000	.53000	23.000	.1980-01	.1640-01	.2200-01	.8603-03	.7151-03	.9576-03	.5680	6.318	546.7
56	2.0000	.56700	24.000	.1370-01	.1140-01	.1530-01	.5984-03	.4977-03	.6658-03	.3960	4.305	544.6
56	2.0000	.62000	25.000	.6700-02	.5600-02	.7400-02	.2905-03	.2417-03	.31-03	.1930	2.098	542.7
56	2.0000	.67000	26.000	.3200-02	.2700-02	.3600-02	.1394-03	.1160-03	.1551-03	.9300-01	1.008	542.1
56	2.0000	.70500	27.000	.2000-02	.1700-02	.2300-02	.8881-04	.7393-04	.9876-04	.5900-01	.6380	540.9
56	2.0000	.75000	28.000	.3200-02	.2600-02	.3500-02	.1381-03	.1150-03	.1536-03	.9200-01	1.011	540.7
56	2.0000	.80000	29.000	.2400-02	.2000-02	.2600-02	.1037-03	.8628-04	.1153-03	.6900-01	.7620	541.3
56	2.0000	.82400	30.000	.8000-03	.7000-03	.9000-03	.3688-04	.3069-04	.4101-04	.2500-01	.3420	541.9
56	3.0000	.20000	31.000	.3290-01	.2730-01	.3660-01	.1430-02	.1187-02	.1593-02	.9380	9.913	551.1
56	3.0000	.22500	32.000	.2650-01	.2200-01	.2950-01	.1154-02	.9532-03	.1285-02	.7600	8.496	548.2
56	3.0000	.25000	33.000	.2040-01	.1700-01	.2270-01	.8881-03	.7384-03	.9984-03	.5870	6.567	545.8
56	3.0000	.27500	34.000	.1530-01	.1270-01	.1700-01	.6545-03	.5527-03	.7392-03	.4410	5.280	543.7
56	3.0000	.30000	35.000	.1600-01	.1330-01	.1780-01	.6952-03	.5784-03	.7733-03	.4610	5.714	543.1
56	3.0000	.32500	36.000	.2720-01	.2260-01	.3020-01	.1183-02	.9839-03	.1316-02	.7830	9.183	544.7
56	3.0000	.35000	37.000	.2660-01	.2210-01	.2960-01	.1157-02	.9618-03	.1287-02	.7660	8.878	545.0
56	3.0000	.37500	38.000	.2070-01	.1720-01	.2300-01	.9004-03	.7488-03	.1002-02	.5960	6.988	544.8
56	3.0000	.40000	39.000	.2770-01	.2300-01	.3080-01	.1205-02	.1002-02	.1341-02	.7980	9.396	545.0
56	3.0000	.42500	40.000	.2890-01	.2400-01	.3210-01	.1257-02	.1045-02	.1399-02	.8300	9.821	546.7
56	3.0000	.45000	41.000	.2430-01	.2020-01	.2700-01	.1057-02	.8790-03	.1176-02	.7000	7.991	544.9
56	3.0000	.47500	42.000	.2200-01	.1830-01	.2450-01	.9574-03	.7960-03	.1065-02	.6330	7.049	545.5
56	3.0000	.50000	43.000	.1340-01	.1110-01	.1490-01	.5833-03	.4851-03	.6489-03	.3870	4.309	543.7
56	3.0000	.52500	44.000	.8000-02	.6600-02	.8900-02	.3472-03	.2889-03	.3861-03	.2310	2.708	542.3
56	3.0000	.55000	45.000	.6500-02	.5500-02	.7300-02	.2856-03	.2377-03	.3176-03	.1900	2.119	541.7
56	3.0000	.60000	46.000	.4000-02	.3300-02	.4900-02	.1748-03	.1456-03	.1944-03	.1160	1.267	540.9
56	3.0000	.65000	47.000	.2400-02	.2000-02	.2700-02	.1043-03	.8686-04	.1160-03	.7000-01	.7400	540.0
56	3.0000	.70000	48.000	.2100-02	.1700-02	.2300-02	.9120-04	.7594-04	.1014-03	.6100-01	.8720	539.8
56	3.0000	.75000	49.000	.2800-02	.2400-02	.3100-02	.1230-03	.1024-03	.1368-03	.8200-01	.8930	540.0
56	3.0000	.80000	50.000	.2300-02	.1900-02	.2500-02	.9952-04	.8284-04	.1105-03	.6500-01	.7110	510.6
56	3.0000	.85000	51.000	.1600-02	.1300-02	.1700-02	.6828-04	.5681-04	.7595-04	.4500-01	.5620	542.6
56	3.0000	.87500	52.000	.1400-02	.1200-02	.1600-02	.6067-04	.5047-04	.6748-04	.4000-01	.4990	543.0
56	3.0000	.90000	53.000	.2200-02	.1900-02	.2500-02	.9752-04	.8112-04	.1085-03	.5500-01	.9010	543.6
56	3.0000	.92500	54.000	.4300-02	.3500-02	.4800-02	.1879-03	.1563-03	.2091-03	.1250	1.633	543.6
56	3.0000	.95000	55.000	.5100-02	.5100-02	.6800-02	.2657-03	.2210-03	.2959-03	.1760	1.784	543.6
56	4.0000	.20000	56.000	.3310-01	.2740-01	.3590-01	.1440-02	.1194-02	.1605-02	.9380	10.66	554.9
56	4.0000	.22500	57.000	.2650-01	.2200-01	.2950-01	.1153-02	.9578-03	.1285-02	.7570	8.849	550.5
56	4.0000	.25000	58.000	.2450-01	.2040-01	.2730-01	.1068-02	.8869-03	.1189-02	.7030	8.219	548.8
56	4.0000	.27500	59.000	.2720-01	.2300-01	.3030-01	.1183-02	.9926-03	.1317-02	.7780	9.609	548.9
56	4.0000	.30000	60.000	.2730-01	.2270-01	.3040-01	.1189-02	.9991-03	.1374-02	.7840	10.25	547.9
56	4.0000	.32500	61.000	.2570-01	.2140-01	.2870-01	.1121-02	.9313-03	.1247-02	.7390	9.670	547.3
56	4.0000	.35000	62.000	.2370-01	.1970-01	.2640-01	.1032-02	.8976-03	.1148-02	.6810	8.916	546.7
56	4.0000	.37500	63.000	.2550-01	.2120-01	.2830-01	.1109-02	.9209-03	.1233-02	.7320	9.982	546.2
56	4.0000	.40000	64.000	.1360-01	.1130-01	.1510-01	.5923-03	.4926-03	.6589-03	.3930	5.147	543.8
56	4.0000	.42500	65.000	.8300-02	.6900-02	.9300-02	.3625-03	.3016-03	.4032-03	.2410	3.158	542.5

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 75

OH-74 (AEDC V419-BRA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 105

OH-74 (AEDC V419-BRA) B62C12F10M16H127E52V8R19

(RY800:)

RUN NUMBER	TWA E	X/L	T/C NO	M/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H1(9T) BTU/ R FT2SEC	H1(T) BTU/ R FT2SEC	H(TAW) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TM DEG. R
56	4.0000	.45000	63.000	.5900-02	.4900-02	.6600-02	.2568-03	.2137-03	.2856-03	.1710	2.215	541.6
56	4.0000	.47500	63.000	.4600-02	.3800-02	.5100-02	.1990-03	.1656-03	.2213-03	.1320	1.689	541.4
56	4.0000	.50000	64.000	.3200-02	.2600-02	.3500-02	.1385-03	.1153-03	.1541-03	.9200-01	1.144	540.7
56	4.0000	.52500	65.000	.2500-02	.2100-02	.2800-02	.1107-03	.9218-04	.1231-03	.7400-01	.9140	540.9
56	4.0000	.55000	66.000	.1600-02	.1400-02	.1800-02	.7139-04	.5943-04	.7937-04	.4800-01	.5590	540.2
56	4.0000	.60000	67.000	.9000-03	.8000-03	.1000-02	.3964-04	.3301-04	.4407-04	.2600-01	.2980	539.3
56	4.0000	.65000	68.000	.1500-02	.1200-02	.1600-02	.6435-04	.5358-04	.7154-04	.4300-01	.5040	540.1
56	4.0000	.70000	69.000	.1500-02	.1200-02	.1600-02	.6445-04	.5366-04	.7166-04	.4300-01	.4800	540.0
56	4.0000	.75000	70.000	.2400-02	.2000-02	.2600-02	.1024-03	.8528-04	.1139-03	.6800-01	.7620	540.4
56	4.0000	.80000	75.000	.1000-02	.8000-03	.1100-02	.4351-04	.3622-04	.4838-04	.2900-01	.3490	541.0
56	4.0000	.87500	77.000	.1200-02	.1000-02	.1300-02	.5143-04	.4281-04	.5720-04	.3400-01	.4490	541.2
56	4.0000	.90000	78.000	.2300-02	.1900-02	.2500-02	.9808-04	.8161-04	.1091-03	.6500-01	.8450	542.3
56	4.0000	.92500	79.000	.4200-02	.3500-02	.4700-02	.1841-03	.1532-03	.2048-03	.1220	1.514	542.9
56	4.0000	.95000	80.000	.1600-02	.1300-02	.1700-02	.6818-04	.5673-04	.7584-04	.4500-01	.5310	542.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITTER FUSELAGE PORT SIDE

PAGE 105

(RV5001)

OH-74 (AEDC V41B-B8A) 962C12F10M16W127E52/8F.9

ORBITTER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	Y DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	HIJ LB-SEC /FT ²
57	7.990	43.95	674.6	1339.	-179.6	-1000.00	97.30	.7000-01	3.113	3861.	.6010-04	.7830-07

RUN NUMBER	RN/L X10 6 /FT	WREF BTU/ R F12SEC	STN NO R=
57	2.963	.4356-01	.2342-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/WREF R=0.9	H/WREF R=1.0	H/WREF R=TAX	H(GTO) BTU/ R F12SEC	H(TO) BTU/ R F12SEC	H(TAK) BTU/ R F12SEC	QDOT BTU/ F12SEC	DTWOT DEG. R /SEC	TM DEG R
57	1.0000	.27500	1.0000	.1450-01	.1200-01	.1610-01	.6311-03	.5247-03	.7024-03	.4170	4.316	544.9
57	1.0000	.30000	2.0000	.1310-01	.1090-01	.1460-01	.5696-03	.4736-03	.6339-03	.3760	3.987	545.0
57	1.0000	.32500	3.0000	.1310-01	.1090-01	.1460-01	.5699-03	.4739-03	.6342-03	.3760	3.981	545.0
57	1.0000	.35000	4.0000	.2010-01	.1670-01	.2240-01	.8761-03	.7283-03	.9751-03	.5780	5.983	545.6
57	1.0000	.37500	5.0000	.1710-01	.1420-01	.1900-01	.7436-03	.6180-03	.8276-03	.4900	5.145	546.0
57	1.0000	.40000	6.0000	.1710-01	.1420-01	.1900-01	.7452-03	.6195-03	.8294-03	.4920	5.045	545.3
57	1.0000	.42500	7.0000	.2210-01	.1830-01	.2460-01	.9613-03	.7989-03	.1070-02	.6330	6.550	546.7
57	1.0000	.45000	8.0000	.2470-01	.2050-01	.2750-01	.1075-02	.8932-03	.1196-02	.7080	7.221	546.7
57	1.0000	.47500	9.0000	.1950-01	.1620-01	.2170-01	.8487-03	.7053-03	.9447-03	.5590	5.680	546.4
57	1.0000	.50000	10.000	.3260-01	.2710-01	.3620-01	.1418-02	.1178-02	.1579-02	.9330	9.436	547.0
57	1.0000	.52500	11.000	.3070-01	.2550-01	.3420-01	.1337-02	.1111-02	.1488-02	.8790	9.895	547.6
57	1.0000	.55000	12.000	.2930-01	.2430-01	.3260-01	.1275-02	.1060-02	.1423-02	.8390	8.413	546.8
57	1.0000	.57500	13.000	.2000-01	.1660-01	.2230-01	.8712-03	.7238-03	.9699-03	.5730	5.790	547.6
57	1.0000	.55000	14.000	.5300-02	.4400-02	.5900-02	.2290-03	.1904-03	.2548-03	.510	1.533	544.0
57	1.0000	.70000	15.000	.1500-02	.1200-02	.1700-02	.6478-04	.5390-04	.7206-04	.4300-01	.4200	542.3
57	1.0000	.75000	16.000	.4200-02	.3500-02	.4700-02	.1828-03	.1521-03	.2034-03	.1210	1.228	542.5
57	1.0000	.80000	17.000	.3600-02	.3000-02	.4000-02	.1570-03	.1306-03	.1746-03	.1040	1.007	543.0
57	1.0000	.85000	18.000	.1480-01	.1230-01	.1650-01	.6449-03	.5351-03	.7177-03	.4260	4.988	545.1
57	2.0000	.29500	19.000	.2590-01	.2150-01	.2880-01	.1127-02	.9357-03	.1255-02	.7420	9.734	546.8
57	2.0000	.33700	20.000	.2170-01	.1800-01	.2410-01	.9440-03	.7845-03	.1051-02	.6220	7.319	546.5
57	2.0000	.39000	21.000	.3570-01	.2950-01	.3980-01	.1555-02	.1291-02	.1732-02	1.019	11.92	549.5
57	2.0000	.42600	22.000	.3530-01	.2930-01	.3930-01	.1535-02	.1275-02	.1710-02	1.009	11.21	548.2

DATE 07 OCT 75

CH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 107

(RV8001)

OH-74 (AEDC V41B-BBA) 862C12F10M16W127E52V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	W/HREF R=0.9	W/HREF R=1.0	W/HREF R=TAN	H19TO BTU/ R F12SEC	H1TO BTU/ R F12SEC	H1TAH BTU/ R F12SEC	ODOT BTU/ R F12SEC	DTMDT DEG. R /SEC	TW DEG. R
57	2.0000	.53000	23.000	.1540-01	.1280-01	.1720-01	.6725-03	.5589-03	.7486-03	.4430	4.929	546.4
57	2.0000	.56700	24.000	.1052-01	.8700-02	.1170-01	.1573-03	.3802-03	.5089-03	.3020	3.282	544.6
57	2.0000	.62000	25.000	.4800-02	.4000-02	.5400-02	.2102-03	.1748-03	.2339-03	.1390	1.513	543.2
57	2.0000	.67000	26.000	.1540-02	.1300-02	.1700-02	.6704-04	.5578-04	.7456-04	.4400-01	.5320	541.8
57	2.0000	.70500	27.000	.2000-02	.1700-02	.2300-02	.8831-04	.7349-04	.9821-04	.5900-01	.5320	541.1
57	2.0000	.75000	28.000	.4000-02	.3300-02	.4400-02	.1727-03	.1437-03	.1920-03	.1150	1.260	541.0
57	2.0000	.80000	29.000	.3200-02	.2700-02	.3600-02	.1395-03	.1161-03	.1552-03	.9300-01	1.023	541.4
57	2.0000	.82400	30.000	.1000-02	.8000-03	.1100-02	.4445-04	.3698-04	.4944-04	.2900-01	.4110	542.0
57	3.0000	.82400	31.000	.3170-01	.2630-01	.3530-01	.1379-02	.1144-02	.1535-02	.9000	9.515	532.0
57	3.0000	.82500	32.000	.2600-01	.2150-01	.2900-01	.1132-02	.9402-03	.1261-02	.7420	8.266	549.6
57	3.0000	.85000	33.000	.2110-01	.1750-01	.2350-01	.9192-03	.7637-03	.1023-02	.6040	6.754	547.6
57	3.0000	.87500	34.000	.1670-01	.1350-01	.1950-01	.7250-03	.6033-03	.8078-03	.4790	5.729	545.6
57	3.0000	.90000	35.000	.1950-01	.1620-01	.2170-01	.8490-03	.7059-03	.9449-03	.5600	6.926	545.5
57	3.0000	.92500	36.000	.2790-01	.2320-01	.3110-01	.1216-02	.1011-02	.1354-02	.80.0	9.382	546.4
57	3.0000	.95000	37.000	.2360-01	.1950-01	.2620-01	.1026-02	.8526-03	.1142-02	.6760	7.841	546.4
57	3.0000	.97500	38.000	.2390-01	.1950-01	.2670-01	.1043-02	.8671-03	.1161-02	.6880	8.058	545.7
57	3.0000	.40000	39.000	.2790-01	.2320-01	.3110-01	.1216-02	.1010-02	.1353-02	.8010	9.433	546.1
57	3.0000	.42500	40.000	.2550-01	.2120-01	.2840-01	.1113-02	.9246-03	.1239-02	.7320	8.665	547.0
57	3.0000	.45000	41.000	.2540-01	.2120-01	.2830-01	.1108-02	.9213-03	.1234-02	.7310	8.340	545.9
57	3.0000	.47500	42.000	.1750-01	.1450-01	.1950-01	.7635-03	.6347-03	.8497-03	.5040	5.609	545.2
57	3.0000	.50000	43.000	.9100-02	.7600-02	.1010-01	.3970-03	.3302-03	.4417-03	.2630	2.925	543.6
57	3.0000	.52500	44.000	.6300-02	.5300-02	.7000-02	.2757-03	.2293-03	.3067-03	.1830	2.144	542.4
57	3.0000	.55000	45.000	.5700-02	.4700-02	.6300-02	.2462-03	.2048-03	.2739-03	.1630	1.819	542.4
57	3.0000	.60000	46.000	.3300-02	.2800-02	.3700-02	.1457-03	.1212-03	.1620-03	.9700-01	1.053	541.1
57	3.0000	.65000	47.000	.2100-02	.1800-02	.2400-02	.8499-04	.7730-04	.1033-03	.5200-01	.6560	540.2
57	3.0000	.70000	48.000	.2000-02	.1600-02	.2200-02	.8499-04	.7074-04	.9450-04	.5700-01	.6250	540.1
57	3.0000	.75000	49.000	.3100-02	.2600-02	.3500-02	.1371-03	.1141-03	.1525-03	.9100-01	.9910	540.9
57	3.0000	.80000	50.000	.2000-01	.1600-02	.2200-02	.9635-04	.7186-04	.9604-04	.5700-01	.6150	541.2
57	3.0000	.85000	51.000	.1500-02	.1200-02	.1600-02	.6340-04	.5274-04	.7054-04	.4200-01	.5200	543.0
57	3.0000	.87500	52.000	.1900-02	.1600-02	.2100-02	.8195-04	.6816-04	.9118-04	.5400-01	.6710	543.5
57	3.0000	.90000	53.000	.2900-02	.2400-02	.3200-02	.1249-03	.1039-03	.1390-03	.8300-01	1.150	544.0
57	3.0000	.92500	54.000	.4300-02	.3600-02	.4800-02	.1859-03	.1554-03	.2090-03	.1230	1.618	544.5
57	3.0000	.95000	55.000	.4300-02	.3500-02	.4700-02	.1856-03	.1543-03	.2065-03	.1230	1.242	544.0
57	4.0000	.20000	71.000	.3140-01	.2610-01	.3500-01	.1359-02	.1135-02	.1526-02	.8990	10.10	555.6
57	4.0000	.22500	72.000	.2710-01	.2250-01	.3020-01	.1182-02	.9913-03	.1318-02	.7720	9.018	552.0
57	4.0000	.25000	73.000	.2530-01	.2140-01	.2890-01	.1124-02	.9333-03	.1252-02	.7350	8.602	550.4
57	4.0000	.27500	74.000	.2770-01	.2300-01	.3200-01	.1264-02	.1002-02	.1345-02	.7000	9.750	550.5
57	4.0000	.30000	75.000	.3130-01	.2600-01	.3490-01	.1364-02	.1133-02	.1515-02	.8930	11.67	550.2
57	4.0000	.32500	76.000	.2550-01	.2120-01	.2840-01	.1109-02	.9212-03	.1235-02	.7280	9.522	548.5
57	4.0000	.35000	77.000	.2520-01	.2170-01	.2910-01	.1139-02	.9465-03	.1269-02	.7480	9.788	546.2
57	4.0000	.37500	78.000	.2330-01	.1940-01	.2600-01	.1016-02	.8443-03	.1131-02	.5690	8.755	546.6
57	4.0000	.40000	79.000	.2330-01	.1940-01	.2600-01	.1016-02	.8443-03	.1131-02	.5690	8.755	546.6
57	4.0000	.42500	80.000	.1100-01	.9100-02	.1220-01	.4786-03	.3979-03	.5325-03	.3160	4.145	544.1
57	4.0000	.45000	81.000	.7600-02	.6300-02	.8400-02	.3290-03	.2736-03	.3660-03	.2180	2.856	543.1

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 108

(RV8001)

OH-74 (AEDC V41B-B8A) B62C12F10H16H127E52VBR19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1GTO BTU/ R FT2SEC	H1TO1 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TH DEG. R
57	4.0000	.45000	62.000	.5400-02	.4500-02	.6000-02	.2333-03	.1941-03	.2595-03	.1550	2.004	542.4
57	4.0000	.47500	63.000	.4000-02	.3300-02	.4400-02	.1723-03	.1433-03	.1916-03	.1140	1.457	541.7
57	4.0000	.50000	64.000	.2600-02	.2200-02	.2900-02	.1137-03	.9458-04	.1264-03	.7500-01	.9350	541.4
57	4.0000	.52500	65.000	.1600-02	.1400-02	.1800-02	.7058-04	.5882-04	.7860-04	.4720-01	.5820	540.8
57	4.0000	.55000	66.000	.8000-03	.7000-03	.9000-03	.3490-04	.2905-04	.3880-04	.2300-01	.2730	540.3
57	4.0000	.60000	67.000	.1100-02	.9000-03	.1200-02	.4788-04	.3986-04	.5323-04	.3200-01	.3590	539.7
57	4.0000	.65000	68.000	.1400-02	.1200-02	.1600-02	.6197-04	.5159-04	.6890-04	.4100-01	.4840	540.0
57	4.0000	.70000	69.000	.1500-02	.1200-02	.1700-02	.6530-04	.5434-04	.7262-04	.4300-01	.4840	540.9
57	4.0000	.75000	70.000	.2500-02	.2100-02	.2700-02	.1075-03	.8948-04	.1196-03	.7100-01	.7960	541.4
57	4.0000	.80000	71.000	.1000-02	.9000-03	.1100-02	.4495-04	.3740-04	.5000-04	.3000-01	.3590	542.1
57	4.0000	.85000	72.000	.1400-02	.1200-02	.1500-02	.6059-04	.5043-04	.6738-04	.4000-01	.4780	540.8
57	4.0000	.87500	73.000	.1200-02	.1000-02	.1300-02	.5272-04	.4385-04	.5855-04	.3500-01	.4580	542.6
57	4.0000	.90000	74.000	.2800-02	.2400-02	.3200-02	.1237-03	.1029-03	.1376-03	.8200-01	1.060	543.7
57	4.0000	.92500	75.000	.5800-02	.4800-02	.6400-02	.2525-03	.2099-03	.2809-03	.1670	2.064	544.3
57	4.0000	.95000	80.000	.7300-02	.6000-02	.8100-02	.3161-03	.2627-03	.3518-03	.2080	2.443	545.5

DATE 07 OCT 76

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 109

ORBITER FUSELAGE

OH-74 (AEDC V41B-BBA) B62C12F10M16M127E52V8R19

(RV8001)

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
87	8.000	19.82	806.5	1341.	180.0	.0000	97.20	.8300-01	3.701	3864.	.7132-04	.7823-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175 .2150-01
87	3.523	.4750-01	

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	R-TAH	H(OTO) BTU/ R FT2SEC	H(TO) BTU/ R FT2SEC	H(TAH) BTU/ R FT2SEC	ODOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
87	1.0000	.27500	1.0000	.1230-01	.1020-01	.1370-01	.5847-03	.4851-03	.6516-03	.3820	3.937	553.8
87	1.0000	.30000	2.0000	.1100-01	.9100-02	.1220-01	.5208-03	.4321-03	.5804-03	.3400	3.590	553.9
87	1.0000	.32500	3.0000	.9500-02	.7900-02	.1060-01	.4518-03	.3749-03	.5034-03	.2950	3.019	553.0
87	1.0000	.35000	4.0000	.9400-02	.7800-02	.1050-01	.4456-03	.3698-03	.4966-03	.2910	3.004	553.3
87	1.0000	.37500	5.0000	.9600-02	.8000-02	.1070-01	.4556-03	.3780-03	.5076-03	.2980	3.116	553.
87	1.0000	.40000	6.0000	.1090-01	.9100-02	.1220-01	.5184-03	.4301-03	.5776-03	.3390	3.462	553.3
87	1.0000	.42500	7.0000	.1050-01	.8700-02	.1170-01	.4986-03	.4137-03	.5556-03	.3250	3.361	553.4
87	1.0000	.45000	8.0000	.1520-01	.1260-01	.1690-01	.7203-03	.5976-03	.8028-03	.4700	4.784	553.8
87	1.0000	.47500	9.0000	.1830-01	.1520-01	.2040-01	.8707-03	.7221-03	.9705-03	.5680	5.742	555.0
87	1.0000	.50000	10.000	.1670-01	.1390-01	.1960-01	.7942-03	.6589-03	.8851-03	.5190	5.225	554.0
87	1.0000	.52500	11.000	.1590-01	.1320-01	.1770-01	.7543-03	.6258-03	.8406-03	.4920	4.963	553.9
87	1.0000	.55000	12.000	.1890-01	.1570-01	.2110-01	.9981-03	.7451-03	.1001-02	.5950	5.856	553.9
87	1.0000	.60000	13.000	.2210-01	.1830-01	.2460-01	.1046-02	.8594-03	.1169-02	.5830	6.873	555.7
87	1.0000	.65000	14.000	.2670-01	.2220-01	.2980-01	.1269-02	.1053-02	.1415-02	.9270	8.329	555.3
87	1.0000	.70000	15.000	.3500-01	.2900-01	.3910-01	.1654-02	.1380-02	.1856-02	1.082	10.51	555.6
87	1.0000	.75000	16.000	.5400-01	.4470-01	.6020-01	.2565-02	.2125-02	.2862-02	1.652	16.71	559.1
87	1.0000	.80000	17.000	.5180-01	.4290-01	.5780-01	.2459-02	.2036-02	.2745-02	1.595	15.21	562.3
87	2.0000	.85000	18.000	.1170-01	.9700-02	.1300-01	.5550-03	.4601-03	.6116-03	.3520	4.226	554.2
87	2.0000	.33700	19.000	.1050-01	.8700-02	.1170-01	.5005-03	.4501-03	.5579-03	.3270	3.832	554.2
87	2.0000	.39000	20.000	.1210-01	.1010-01	.1350-01	.5757-03	.4775-03	.6416-03	.3760	4.409	553.9
87	2.0000	.42600	21.000	.1990-01	.1650-01	.2220-01	.9448-03	.3-03	.1053-02	.6140	7.160	556.5
87	2.0000	.47800	22.000	.2000-01	.1650-01	.2230-01	.9498-03	.3-03	.1059-02	.6180	6.847	555.9

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 110

(RVB0001)

OH-74 (AEDC V418-B8A) B62C12F10M16M127E52V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H19T01 BTU/R FT2SEC	H1T01 BTU/R FT2SEC	H1TAM BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEC/R /SEC	TW DEC/R
87	2.0000	53000	23.000	.3270-01	.2710-01	.3640-01	.1552-02	.1286-02	.1730-02	1.008	11.15	557.4
87	2.0000	56700	24.000	.3440-01	.2850-01	.3840-01	.1634-02	.1354-02	.1822-02	1.080	11.43	558.5
87	2.0000	62000	25.000	.5200-01	.4300-01	.5800-01	.2469-02	.2044-02	.2755-02	1.594	17.17	561.2
87	2.0000	67000	26.000	.6800-01	.5620-01	.7600-01	.3230-02	.2671-02	.3608-02	2.069	24.23	566.5
87	2.0000	70500	27.000	.4520-01	.3740-01	.5050-01	.2148-02	.1779-02	.2397-02	1.387	14.80	561.3
87	2.0000	75000	28.000	.2110-01	.1750-01	.2350-01	.1003-02	.8319-03	.1118-02	.6550	7.148	554.1
87	2.0000	80000	29.000	.1690-01	.1400-01	.1890-01	.8037-03	.6670-03	.8955-03	5.260	5.772	552.8
87	2.0000	82400	30.000	.6100-02	.5100-02	.6800-02	.2900-03	.2407-03	.3230-03	1.900	2.635	551.8
87	3.0000	20000	31.000	.2850-01	.2360-01	.3180-01	.1355-02	.1123-02	.1511-02	.8800	9.272	557.5
87	3.0000	22500	32.000	.2240-01	.1850-01	.2500-01	.1063-02	.0811-03	.1186-02	.6900	7.671	557.9
87	3.0000	25000	33.000	.1630-01	.1350-01	.1810-01	.7725-03	.6406-03	.8612-03	5.030	5.598	555.8
87	3.0000	27500	34.000	.1270-01	.1060-01	.1420-01	.6054-03	.5021-03	.6747-03	3.950	4.704	554.6
87	3.0000	30000	35.000	.1100-01	.9100-02	.1230-01	.5229-03	.4338-03	.5827-03	3.410	4.204	554.0
87	3.0000	32500	36.000	.1180-01	.9800-02	.1310-01	.5592-03	.4639-03	.6232-03	3.650	4.258	554.2
87	3.0000	35000	37.000	.1250-01	.1040-01	.1400-01	.5959-03	.4943-03	.6641-03	3.890	4.487	554.5
87	3.0000	37500	38.000	.1350-01	.1120-01	.1500-01	.6412-03	.5319-03	.7147-03	4.180	4.882	554.3
87	3.0000	40000	39.000	.2170-01	.1800-01	.2420-01	.1030-02	.8536-03	.1148-02	.6700	7.848	556.3
87	3.0000	42500	40.000	.2710-01	.2250-01	.3020-01	.1287-02	.1067-02	.1426-02	.8350	9.829	558.1
87	3.0000	45000	41.000	.2600-01	.2150-01	.2890-01	.1233-02	.1022-02	.1375-02	.8020	9.105	556.5
87	3.0000	47500	42.000	.3100-01	.2570-01	.3450-01	.1471-02	.1219-02	.1641-02	.9540	10.55	558.4
87	3.0000	50000	43.000	.3770-01	.3120-01	.4210-01	.1791-02	.1483-02	.1998-02	1.158	12.79	560.3
87	3.0000	52500	44.000	.5130-01	.4250-01	.5730-01	.2439-02	.2020-02	.2721-02	1.575	18.32	560.9
87	3.0000	55000	45.000	.6910-01	.5710-01	.7710-01	.3281-02	.2713-02	.3653-02	2.105	23.20	565.2
87	3.0000	60000	46.000	.6020-01	.4990-01	.6720-01	.2862-02	.2368-02	.3194-02	1.842	19.83	563.1
87	3.0000	65000	47.000	.2370-01	.1970-01	.2650-01	.1128-02	.9354-03	.1257-02	.7350	7.759	554.8
87	3.0000	70000	48.000	.1040-01	.1180-01	.1590-01	.6761-03	.5610-03	.7533-03	.4420	4.855	552.8
87	3.0000	75000	49.000	.1420-01	.1180-01	.1590-01	.4949-03	.4107-03	.5513-03	.3240	3.507	552.2
87	3.0000	80000	50.000	.8800-02	.7300-02	.9800-02	.4170-03	.3462-03	.4645-03	.2730	2.917	551.3
87	3.0000	85000	51.000	.1170-01	.9700-02	.1310-01	.5573-03	.4626-03	.6209-03	.3650	4.500	552.0
87	3.0000	87500	52.000	.2580-01	.2140-01	.2870-01	.1224-02	.1014-02	.1364-02	.7960	9.795	556.1
87	3.0000	90000	53.000	.1340-01	.1110-01	.1490-01	.6341-03	.5260-03	.7068-03	.4140	5.727	554.8
87	3.0000	92500	54.000	.1250-01	.1040-01	.1400-01	.5948-03	.4935-03	.6629-03	.3980	5.066	553.8
87	3.0000	95000	55.000	.1280-01	.1060-01	.1430-01	.6079-03	.5045-03	.6773-03	.3980	4.011	552.6
87	4.0000	20000	71.000	.3570-01	.2950-01	.3990-01	.1698-02	.1406-02	.1895-02	1.094	12.39	562.4
87	4.0000	22500	72.000	.2730-01	.2260-01	.3050-01	.1297-02	.1074-02	.1447-02	.8420	9.770	559.4
87	4.0000	25000	73.000	.2070-01	.1720-01	.2310-01	.9851-03	.8168-03	.1099-02	.6390	7.443	558.2
87	4.0000	27500	74.000	.1600-01	.1330-01	.1790-01	.7613-03	.6311-03	.8458-03	.4950	6.094	556.9
87	4.0000	30000	75.000	.1360-01	.1130-01	.1520-01	.6477-03	.5371-03	.7271-03	.4220	5.496	555.6
87	4.0000	32500	57.000	.1560-01	.1300-01	.1740-01	.7428-03	.5159-03	.8281-03	.4830	7.295	556.1
87	4.0000	35000	58.000	.2780-01	.2300-01	.3100-01	.1320-02	.1093-02	.1472-02	.9550	11.1	559.4
87	4.0000	37500	59.000	.3830-01	.3150-01	.4240-01	.1807-02	.1496-02	.2015-02	1.167	15.16	561.0
87	4.0000	40000	60.000	.5450-01	.4510-01	.6090-01	.2591-02	.2144-02	.2893-02	1.666	21.62	563.9
87	4.0000	42500	61.000	.7910-01	.6530-01	.8840-01	.3757-02	.3104-02	.4199-02	2.393	30.95	571.0

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 111

(RVB001)

OH-74 (AEDC V41B-B8A) B62C12*10M16W127E52V8R19

RUN NUMBER	T/A/E	X/L	T/C NO	H/HREF		H/HREF		H/HREF		H(9TO)		H(10)		H(1AW)		QOOT BTU/ FT2SEC	DTWDY DEG. R /SEC	TH DEG. R
				R=0.9	R=1.0	R-TAW	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC			
87	4.0000	45000	62.000	.8490-01	.7010-01	.9500-01	.4035-02	.3329-02	.4514-02	.4514-02	.4514-02	.4514-02	.4514-02	.4514-02	.4514-02	2.551	32.53	574.7
87	4.0000	47500	63.000	.5940-01	.4910-01	.6640-01	.2823-02	.2332-02	.3156-02	.3156-02	.3156-02	.3156-02	.3156-02	.3156-02	.3156-02	1.798	22.60	569.9
87	4.0000	50000	64.000	.3490-01	.2890-01	.3900-01	.1660-02	.1375-02	.1852-02	.1852-02	.1852-02	.1852-02	.1852-02	.1852-02	.1852-02	1.074	13.18	560.0
87	4.0000	52500	65.000	.2290-01	.1900-01	.2550-01	.1088-02	.9019-03	.1213-02	.1213-02	.1213-02	.1213-02	.1213-02	.1213-02	.1213-02	.7070	8.693	557.1
87	4.0000	55000	66.000	.1830-01	.1520-01	.2040-01	.8590-03	.7206-03	.9688-03	.9688-03	.9688-03	.9688-03	.9688-03	.9688-03	.9688-03	.5660	6.594	555.9
87	4.0000	60000	67.000	.1150-01	.9500-02	.1280-01	.5459-02	.4530-03	.6083-03	.6083-03	.6083-03	.6083-03	.6083-03	.6083-03	.6083-03	.3570	3.996	553.3
87	4.0000	65000	68.000	.9300-02	.7700-02	.1340-01	.4417-03	.3666-03	.4921-03	.4921-03	.4921-03	.4921-03	.4921-03	.4921-03	.4921-03	.2890	3.377	552.2
87	4.0000	70000	69.000	.5600-02	.4700-02	.6300-02	.2670-03	.2217-03	.2975-03	.2975-03	.2975-03	.2975-03	.2975-03	.2975-03	.2975-03	.1750	1.941	551.9
87	4.0000	75000	70.000	.6300-02	.5200-02	.7000-02	.2981-03	.2475-03	.3321-03	.3321-03	.3321-03	.3321-03	.3321-03	.3321-03	.3321-03	.1960	2.170	551.0
87	4.0000	80000	71.000	.2200-02	.1800-02	.2400-02	.1043-03	.8662-04	.1162-03	.1162-03	.1162-03	.1162-03	.1162-03	.1162-03	.1162-03	.6800-01	.8220	550.5
87	4.0000	85000	76.000	.2400-02	.2000-02	.2600-02	.1127-03	.9361-04	.1255-03	.1255-03	.1255-03	.1255-03	.1255-03	.1255-03	.1255-03	.7400-01	.8740	550.5
87	4.0000	87500	77.000	.5600-02	.4700-02	.6300-02	.2675-03	.2221-03	.2979-03	.2979-03	.2979-03	.2979-03	.2979-03	.2979-03	.2979-03	.1760	2.293	550.6
87	4.0000	90000	78.000	.1450-01	.1210-01	.1620-01	.6905-03	.5728-03	.7695-03	.7695-03	.7695-03	.7695-03	.7695-03	.7695-03	.7695-03	.4510	5.811	553.9
87	4.0000	92500	79.000	.1180-01	.9800-02	.1320-01	.5610-03	.4655-03	.6252-03	.6252-03	.6252-03	.6252-03	.6252-03	.6252-03	.6252-03	.3670	4.517	553.3
87	4.0000	95000	80.000	.4600-02	.3800-02	.5100-02	.2176-03	.1807-03	.2424-03	.2424-03	.2424-03	.2424-03	.2424-03	.2424-03	.2424-03	.1430	1.668	551.0

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 112

ORBITER FUSELAGE

OH-74 (AEDC V41B-B8A) 862C12F10H16H12/E52VBR19

(RVB0011)

PARAMETRIC DATA

BETA = .0000 MACH = P 000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	HI LB-SEC /FT ²
88	6 000	24.89	808.2	134.1	180.0	.0000	97.20	.8300-01	3.709	3864.	.7148-04	.7823-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R- 0175
88	3.530	.4755-01	.2148-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT ² SEC	H(10) BTU/ R FT ² SEC	H(14H) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	OTWDT DEG. R /SEC	TW DEG. R
88	1.0000	.27500	1.0000	.1300-01	.1080-01	.1450-01	.6204-03	.5157-03	.6905-03	.4100	4.241	546.4
88	1.0030	.30000	2.0000	.1170-01	.9700-02	.1300-01	.5554-03	.4616-03	.6102-03	.3570	3.883	546.9
88	1.0000	.32500	3.0000	.1010-01	.8400-02	.1120-01	.4798-03	.3988-03	.5341-03	.3170	3.247	546.9
88	1.0000	.35000	4.0000	.1150-01	.9500-02	.1280-01	.5463-03	.4540-03	.6081-03	.3600	3.729	547.1
88	1.0000	.37500	5.0000	.1100-01	.9100-02	.1220-01	.5219-03	.4337-03	.5809-03	.3440	3.611	547.3
88	1.0000	.40000	6.0000	.1160-01	.9600-02	.1290-01	.5499-03	.4570-03	.6121-03	.3630	3.719	547.1
88	1.0000	.42500	7.0000	.1690-01	.1410-01	.1890-01	.8049-03	.6886-03	.8962-03	.5293	5.471	549.2
88	1.0030	.45000	8.0000	.1790-01	.1430-01	.1990-01	.8515-03	.7073-03	.9482-03	.5500	5.708	549.2
88	1.0000	.47500	9.0000	.1820-01	.1500-01	.2010-01	.8573-03	.7120-03	.9546-03	.5540	5.717	549.5
88	1.0000	.50000	10.000	.1930-01	.1570-01	.2110-01	.9000-03	.7475-03	.1002-02	.5910	5.973	549.7
88	1.0000	.52500	11.000	.2010-01	.1670-01	.2240-01	.9577-03	.7953-03	.1067-02	.6290	6.348	550.3
88	1.0000	.55000	12.000	.2340-01	.1940-01	.2600-01	.1111-02	.9224-03	.1237-02	.7290	7.289	550.9
88	1.0000	.60000	13.000	.3480-01	.2880-01	.3870-01	.1653-02	.1372-02	.1842-02	1.080	10.88	553.9
88	1.0000	.65000	14.000	.7180-01	.5950-01	.8010-01	.3414-02	.2828-02	.3308-02	2.211	22.22	559.3
88	1.0000	.70000	15.000	.4390-01	.3540-01	.4390-01	.2287-02	.1730-02	.2327-02	1.350	13.17	557.0
88	1.0000	.75000	16.000	.2160-01	.1790-01	.2410-01	.1028-02	.8531-03	.1145-02	.6730	6.780	552.0
88	1.0000	.80000	17.000	.1160-01	.9500-02	.1290-01	.5507-03	.4571-03	.6135-03	.3500	3.476	552.4
88	2.0000	.28500	18.000	.1400-01	.1160-01	.1550-01	.6635-03	.5518-03	.7312-03	.4390	5.151	544.6
88	2.0000	.33000	19.000	.1390-01	.1160-01	.1550-01	.6605-03	.5493-03	.7348-03	.4380	5.159	544.2
88	2.0000	.39000	20.000	.2090-01	.1740-01	.2320-01	.9927-03	.8252-03	.1105-02	.6560	7.721	546.3
88	2.0000	.42600	21.000	.2240-01	.1860-01	.2490-01	.1054-02	.8843-03	.1185-02	.7020	8.212	547.6
88	2.0000	.47800	22.000	.2770-01	.2300-01	.3080-01	.1315-02	.1093-02	.1464-02	.8670	9.633	548.0

DATE 07 OCT 75

OH-74 (AEDC V41B-99A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 113

RVB0011

OH-74 (AEDC V41B-99A) B62C12F10M16M127E52VBR19

RUN NUMBER	TRAJ E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H(1ST) BTU/ R FT2SEC	H(1ST) BTU/ R FT2SEC	H(TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. P /SEC	TA DEG. R
38	2.0000	.5300	23.000	.5070-01	.4210-01	.5650-01	.2411-02	.2900-02	.2687-02	1.574	17.44	554.1
38	2.0000	.5670	24.000	.6330-01	.6990-01	.9300-01	.3960-02	.3277-02	.4421-02	2.548	27.42	563.4
38	2.0000	.6200	25.000	.3520-01	.2920-01	.5920-01	.1673-02	.1388-02	.1864-02	1.094	11.84	552.7
38	2.0000	.6700	26.000	.1490-01	.1240-01	.1660-01	.7095-03	.5894-03	.7900-03	.4670	5.084	548.7
38	2.0000	.7050	27.000	.1160-01	.9600-02	.1290-01	.5508-03	.4577-03	.6132-03	.3630	3.901	547.6
38	2.0000	.7500	28.000	.9100-02	.7600-02	.1010-01	.4330-03	.3600-03	.4819-03	.2860	3.139	545.7
38	2.0000	.8000	29.000	.8400-02	.7000-02	.9300-02	.3975-03	.3305-03	.4429-03	.2620	2.889	547.5
38	2.0000	.8240	30.000	.1800-02	.1500-02	.2000-02	.9682-04	.7210-04	.9669-04	.5700-01	.7020	550.1
38	3.0000	.8200	31.000	.3010-01	.2500-01	.3350-01	.1431-02	.1188-02	.1595-02	50	9.870	553.8
38	3.0000	.8250	32.000	.2570-01	.2130-01	.2860-01	.1222-02	.1015-02	.1361-02	8030	8.968	549.6
38	3.0000	.8500	33.000	.1950-01	.1620-01	.2170-01	.9275-03	.7711-03	.1032-02	6130	6.855	546.1
38	3.0000	.8750	34.000	.1500-01	.1250-01	.1670-01	.7149-03	.5947-03	.7954-03	.4740	5.679	543.8
38	3.0000	.9000	35.000	.1360-01	.1130-01	.510-01	.6464-03	.5378-03	.7190-03	.4290	5.316	542.8
38	3.0000	.9250	36.000	.1420-01	.1180-01	.1430-01	.6735-03	.5603-03	.7492-03	.4470	5.243	543.2
38	3.0000	.9500	37.000	.1570-01	.1310-01	.1750-01	.7479-03	.6221-03	.8320-03	.4960	5.758	543.6
38	3.0000	.9750	38.000	.2570-01	.2140-01	.2860-01	.1222-02	.1016-02	.1360-02	.8080	9.465	545.7
38	3.0000	.9700	39.000	.3630-01	.2710-01	.3630-01	.1550-02	.1288-02	.1288-02	1.222	12.07	547.5
38	3.0000	.9750	40.000	.3650-01	.3440-01	.4070-01	.1739-02	.1444-02	.1937-02	1.142	13.49	550.3
38	3.0000	.9750	41.000	.4720-01	.3920-01	.5250-01	.2242-02	.1862-02	.2497-02	1.676	16.76	550.4
38	3.0000	.9750	42.000	.6510-01	.5790-01	.7640-01	.3260-02	.2702-02	.3625-02	2.118	23.44	557.1
38	3.0000	.9750	43.000	.7340-01	.6100-01	.8190-01	.3488-02	.2889-02	.3892-02	2.254	24.90	560.6
38	3.0000	.9750	44.000	.4080-01	.3390-01	.4540-01	.1938-02	.1609-02	.2159-02	1.269	14.82	551.9
38	3.0000	.9750	45.000	.2770-01	.2300-01	.3090-01	.1319-02	.1096-02	.1459-02	.8670	9.629	545.8
38	3.0000	.9750	46.000	.1430-01	.1190-01	.1590-01	.6780-03	.5634-03	.7547-03	.4470	4.950	547.5
38	3.0000	.9750	47.000	.8900-02	.7400-02	.9300-02	.4243-03	.3527-03	.4723-03	.2800	2.970	546.4
38	3.0000	.9750	48.000	.6200-02	.5200-02	.6200-02	.2959-03	.2467-03	.3292-03	.1960	2.157	545.4
38	3.0000	.9750	49.000	.5100-02	.4400-02	.5600-02	.2411-03	.2005-03	.2682-03	.1600	1.736	544.3
38	3.0000	.9750	50.000	.2600-02	.2000-02	.2600-02	.1257-02	.1045-03	.1398-03	.1560	1.928	550.1
38	3.0000	.9750	51.000	.5000-02	.4200-02	.5000-02	.2374-03	.1975-03	.2649-03	.1560	1.928	550.1
38	3.0000	.9750	52.000	.9500-02	.7700-02	.9400-02	.4031-03	.3346-03	.4490-03	.2640	3.257	551.5
38	3.0000	.9750	53.000	.3700-01	.1400-01	.5300-01	.6510-03	.5405-03	.7259-03	.4260	5.900	553.3
38	3.0000	.9750	54.000	.1950-01	.1530-01	.2190-01	.9318-03	.7729-03	.1039-02	.6080	7.919	554.2
38	3.0000	.9750	55.000	.1870-01	.1550-01	.2020-01	.8903-03	.7356-03	.9921-03	.5820	5.860	553.7
38	4.0000	.9750	56.000	.3700-01	.3120-01	.4200-01	.1793-02	.1485-02	.2020-02	1.160	13.14	550.1
38	4.0000	.9750	57.000	.2800-01	.2350-01	.3100-01	.1349-02	.1119-02	.1574-02	.8900	10.26	554.8
38	4.0000	.9750	58.000	.1630-01	.1630-01	.2520-01	.1670-02	.1690-02	.1197-02	7040	8.223	551.9
38	4.0000	.9750	59.000	.1070-01	.1550-01	.2080-01	.4200-03	.3380-03	.9914-03	.5830	7.193	551.5
38	4.0000	.9750	60.000	.1550-01	.1220-01	.1730-01	.1700-03	.1450-03	.1812-03	.4490	6.399	545.6
38	4.0000	.9750	61.000	.2770-01	.2700-01	.3030-01	.1315-02	.1092-02	.1484-02	.9500	11.28	550.1
38	4.0000	.9750	62.000	.4730-01	.3320-01	.5270-01	.2249-02	.1265-02	.2505-02	1.457	19.12	554.7
38	4.0000	.9750	63.000	.6820-01	.5650-01	.7610-01	.3245-02	.2637-02	.3620-02	2.098	27.26	560.4
38	4.0000	.9750	64.000	.4940-01	.4100-01	.5510-01	.2350-02	.1948-02	.2619-02	1.530	15.93	555.8
38	4.0000	.9750	65.000	.2930-01	.2350-01	.3150-01	.1343-02	.1115-02	.1497-02	.8600	11.49	551.1

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER "USELAGE PORT SIDE

PAGE 114

OH-74 (AEDC V41B-B8A) B62C12F10M12W127E52VBR19

(RVB(01))

RUN NUMBER	TRAVE	X/L	T/L NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=1.1A	H(9TO) BTU/ R FT2SEC	H(10) BTU/ H FT2SEC	H(TAN) BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTMDT SEC	TW DEG. R
88	4.0000	45000	62.000	.1690-01	.1400-01	.1880-01	.8076-03	.6674-03	.8943-03	.3290	6.818	549.9
88	4.0000	47500	63.000	.1230-01	.01	.1370-01	.5818-03	.4866-03	.6523-03	.3870	4.891	549.4
88	4.0000	50000	64.000	.8900-02	.41-02	.9000-02	.4230-03	.3520-03	.4718-03	.2790	3.444	546.7
88	4.0000	52500	55.000	.7200-02	.3000-02	.3000-02	.3417-03	.2839-03	.3805-03	.2250	2.777	548.8
88	4.0000	55000	66.000	.6400-02	.2	.7100-02	.3053-03	.2537-03	.3390-03	.2010	2.353	548.3
88	4.0000	60000	67.000	.4900-02	.01	.5400-02	.2307-03	.1917-03	.2568-03	.1529	1.707	547.9
88	4.0000	65000	68.000	.3600-02	.01	.4000-02	.1721-03	.1431-03	.1916-03	.1140	1.330	546.9
88	4.0000	70000	69.000	.2200-02	.1900-02	.2500-02	.1061-03	.0820-04	.1107-03	.7000-01	.7790	546.9
88	4.0000	75000	70.000	.1700-02	.1400-02	.1700-02	.8760-04	.6813-04	.9190-04	.5500-01	.6090	544.4
88	4.0000	80000	75.000	.1500-02	.1500-02	.30-02	.8813-04	.7326-04	.9809-04	.5800-01	.7000	546.5
88	4.0000	85000	76.000	.2200-02	.1800-02	.2500-02	.1051-03	.873-04	.1169-03	.6900-01	.8220	546.3
88	4.0000	90000	77.000	.3200-02	.2600-02	.3500-02	.1510-03	.12	.1581-03	.1000-00	1.302	547.5
88	4.0000	95000	78.000	.5500-02	.4600-02	.6200-02	.2634-03	.2148-03	.2932-03	.1730	2.240	548.7
88	4.0000	92500	79.000	.7500-02	.6200-02	.8300-02	.3551-03	.2721-03	.3965-03	.2340	2.890	549.4
88	4.0000	95000	80.000	.8100-02	.6700-02	.9000-02	.3850-03	.3136-03	.4288-03	.2520	2.950	551.1

DATE 07 OCT 75

OH-74 (AEDC V41B-RBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 115

ORBITER FUSELAGE

OH-74 (AEDC V41B-RBA) BE C12F10H16H127E52VBR19

(4V800)

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
89	8.000	29.86	807.0	1343.	180.0	.0000	97.30	.8300-01	3.703	3867.	.7126-04	.7835-07
RUN NUMBER	RN/L X10 6	HREF BTU/ R	STN NO R=									
89	3.517	.4753-01	.0175									

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1ST0 BTU/ R	H1ST0 FT2SEC	H1T01 BTU/ R	H1T01 FT2SEC	H1TAK BTU/ R	H1TAK FT2SEC	QDOT BTU/ R	QDOT FT2SEC	DTWOT DEG. R	TH DEG. R
89	1.0000	.27500	1.0000	.1460-01	.1210-01	.1620-01	.6936-03	.5765-03	.5765-03	.7721-03	.7721-03	.4590			4.742	547.7
89	1.0000	.30000	2.0000	.1250-01	.1040-01	.1390-01	.5933-03	.4931-03	.4931-03	.6603-03	.6603-03	.7920			4.154	547.5
89	1.0000	.32500	3.0000	.1180-01	.0900-02	.132 -01	.5620-03	.4671-03	.4671-03	.6255-03	.6255-03	.3720			3.809	547.6
89	1.0000	.35000	4.0000	.1160-01	.0600-02	.1290 -01	.5508-03	.4577-03	.4577-03	.6131-03	.6131-03	.3640			3.763	548.0
89	1.0000	.37500	5.0000	.1420-01	.1190-01	.1580-01	.6739-03	.5600-03	.5600-03	.7500-03	.7500-03	.4450			4.670	547.6
89	1.0000	.40000	6.0000	.1960-01	.1630-01	.2180-01	.9301-03	.7727-03	.7727-03	.1035-02	.1035-02	.6130			6.281	549.2
89	1.0000	.42500	7.0000	.1890-01	.1570-01	.2100-01	.8963-03	.7444-03	.7444-03	.9981-03	.9981-03	.5900			6.094	550.4
89	1.0000	.45000	8.0000	.1890-01	.1570-01	.2110-01	.8993-03	.7470-03	.7470-03	.1001-02	.1001-02	.5920			6.032	550.3
89	1.0000	.47500	9.0000	.1640-01	.1360-01	.1830-01	.7791-03	.6471-03	.6471-03	.8675-03	.8675-03	.5130			5.205	549.9
89	1.0000	.50000	10.000	.2220-01	.1840-01	.2470-01	.1053-02	.9746-03	.9746-03	.1173-02	.1173-02	.6930			6.991	550.9
89	1.0000	.52500	11.000	.2520-01	.2090-01	.2800-01	.1196-02	.9930-03	.9930-03	.1332-02	.1332-02	.7850			7.920	552.2
89	1.0000	.55000	12.000	.3100-01	.2570-01	.3450-01	.1472-02	.1222-02	.1222-02	.1539-02	.1539-02	.9650			9.658	552.1
89	1.0000	.60000	13.000	.4230-01	.3510-01	.4720-01	.2011-02	.1667-02	.1667-02	.2242-02	.2242-02	1.309			13.17	557.7
89	1.0000	.65000	14.000	.3080-01	.2550-01	.3430-01	.1455-02	.1215-02	.1215-02	.1632-02	.1632-02	.9590			9.662	554.0
89	1.0000	.70000	15.000	.2530-01	.2100-01	.2820-01	.1204-02	.9992-03	.9992-03	.1342-02	.1342-02	.7880			7.665	553.9
89	1.0000	.75000	16.000	.1450-01	.1200-01	.1610-01	.6674-03	.5709-03	.5709-03	.7655-03	.7655-03	.4530			4.568	550.4
89	1.0000	.80000	17.000	.5100-02	.4200-02	.5600-02	.2410-03	.2002-03	.2002-03	.2684-03	.2684-03	.1590			1.532	550.5
89	2.0000	.28500	18.000	.1530-01	.1270-01	.1760-01	.7249-03	.6025-03	.6025-03	.8038-03	.8038-03	.4790			5.612	547.3
89	2.0000	.33700	19.000	.1280-01	.1060-01	.1420-01	.6061-03	.5040-03	.5040-03	.6745-03	.6745-03	.4020			4.128	546.2
89	2.0000	.39000	20.500	.2500-01	.2090-01	.2780-01	.1187-02	.9832-03	.9832-03	.1321-02	.1321-02	.7840			9.220	549.2
89	2.0000	.42600	21.000	.2590-01	.2140-01	.2870-01	.1227-02	.1019-02	.1019-02	.1366-02	.1366-02	.8080			9.438	550.4
89	2.0000	.47800	22.000	.4250-01	.3530-01	.4740-01	.2023-02	.1679-02	.1679-02	.2254-02	.2254-02	1.327			14.71	553.0

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 116

(R/B0011)

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-BBA) B62C12F.0M16W127E52V8R19

RUN NUMBER	TRA'VE	X/L	T/C NO	H/HREF K=0.9	H/HREF R=1.0	H/HREF R-TAW	H(9TO) BTU/ R FT2SEC	H(10I) BTU/ R FT2SEC	H(1AW) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	OTWOT DEG. R /SEC	TH DEG R
89	2.0000	53000	23.000	.4140-01	.3430-01	.4610-01	.1968-02	.1632-02	.2193-02	1.284	9.22	555.9
89	2.0000	56700	24.000	.2700-01	.2240-01	.3010-01	.1284-02	.1066-02	.1430-02	.8430	9.123	552.
89	2.0000	62000	25.000	.1690-01	.1400-01	.1880-01	.8026-03	.6665-03	.8939-03	.5290	5.718	550.9
89	2.0000	67000	26.000	.1130-01	.9400-02	.1260-01	.5374-03	.4466-03	.5982-03	.3550	3.848	548.3
89	2.0000	70500	27.000	.8600-02	.7100-02	.9500-02	.4073-03	.3386-03	.4533-03	.2700	2.897	546.9
89	2.0000	75000	28.000	.6200-02	.5100-02	.6900-02	.2930-03	.2437-03	.3260-03	.1940	2.132	545.4
89	2.0000	80000	29.000	.3800-02	.3200-02	.4300-02	.1820-03	.1513-03	.2026-03	.1200	1.327	546.8
89	2.0000	82400	30.000	.1700-02	.1400-02	.1900-02	.8200-04	.6813-04	.9130-04	.5400-01	.7510	549.2
89	3.0000	20000	31.000	.3210-01	.2660-01	.3580-01	.1526-02	.1266-02	.1701-02	.9960	10.50	556.4
89	3.0000	22500	32.000	.2680-01	.2220-01	.2980-01	.1272-02	.1055-02	.1417-02	.8340	9.291	553.0
89	3.0000	25000	33.000	.2080-01	.1730-01	.2320-01	.9888-03	.8214-03	.1101-02	.6520	7.275	549.7
89	3.0000	27500	34.000	.1630-01	.1360-01	.1820-01	.7756-03	.6447-03	.8631-03	.5130	6.139	546.9
89	3.0000	30000	35.000	.1410-01	.1170-01	.1570-01	.6658-03	.5570-03	.7454-03	.4440	5.489	545.9
89	3.0000	32500	36.000	.1480-01	.1230-01	.1640-01	.7020-03	.5837-03	.7811-03	.4650	5.451	545.8
89	3.0000	35000	37.000	.2520-01	.2090-01	.2800-01	.1157-02	.9949-03	.1332-02	.7910	9.167	547.5
89	3.0000	37500	38.000	.3250-01	.2700-01	.3620-01	.1543-02	.1232-02	.1718-02	1.018	11.90	549.2
89	3.0000	40000	39.000	.3000-01	.2490-01	.3340-01	.1427-02	.1185-02	.1589-02	.9400	11.05	550.1
89	3.0000	42500	40.000	.3150-01	.2630-01	.3520-01	.1503-02	.1248-02	.1674-02	.9990	11.67	551.3
89	3.0000	45000	41.000	.4320-01	.3580-01	.4810-01	.2051-02	.1702-02	.2285-02	1.344	15.28	553.6
89	3.0000	47500	42.000	.2680-01	.2390-01	.3210-01	.1369-02	.1135-02	.1524-02	.9000	9.984	551.4
89	3.0000	50000	43.000	.2490-01	.2060-01	.2770-01	.1182-02	.9812-03	.1316-02	.7770	8.624	551.1
89	3.0000	52500	44.000	.1660-01	.1380-01	.1850-01	.7890-03	.6555-03	.8785-03	.5200	6.095	549.2
89	3.0000	55000	45.000	.1280-01	.1070-01	.1430-01	.6100-03	.5068-03	.6791-03	.4030	4.475	548.6
89	3.0000	60000	46.000	.7800-02	.6500-02	.8700-02	.3724-03	.3095-03	.4144-03	.2460	2.672	547.2
89	3.0000	65000	47.000	.5200-02	.4400-02	.5800-02	.2487-03	.2068-03	.2767-03	.1650	1.746	546.2
89	3.0000	70000	48.000	.4300-02	.3600-02	.4800-02	.2045-03	.1701-03	.2275-03	.1350	1.496	545.2
89	3.0000	75000	49.000	.2500-02	.2100-02	.2800-02	.1175-03	.9776-04	.1307-03	.7800-01	.8490	543.9
89	3.0000	80000	50.000	.2800-02	.2400-02	.3200-02	.1349-03	.1122-03	.1500-03	.9000-01	.9580	544.5
89	3.0000	85000	51.000	.2700-02	.2200-02	.3000-02	.1271-03	.1056-03	.1415-03	.8400-01	1.035	549.0
89	3.0000	87500	52.000	.2500-02	.2100-02	.2800-02	.1208-03	.1003-03	.1345-03	.8000-01	.9810	550.2
89	3.0000	90000	53.000	.3300-02	.2800-02	.3700-02	.1584-03	.1316-03	.1764-03	.1490	1.446	550.8
89	3.0000	92500	54.000	.4000-02	.3300-02	.4500-02	.1903-03	.1585-03	.2120-03	.1250	1.634	551.4
89	3.0000	95000	55.000	.4000-02	.3300-02	.4400-02	.1889-03	.1558-03	.2103-03	.1240	1.254	551.0
89	4.0000	20000	71.000	.3740-01	.3090-01	.4170-01	.1776-02	.1471-02	.1982-02	1.149	13.00	556.9
89	4.0000	22500	72.000	.2830-01	.2350-01	.3160-01	.1347-02	.1117-02	.1502-02	.8780	10.23	562.1
89	4.0000	25000	73.000	.2040-01	.1690-01	.2280-01	.9707-03	.8054-03	.1082-02	.6350	7.411	554.2
89	4.0000	27500	74.000	.2120-01	.1760-01	.2350-01	.1008-02	.8368-03	.1123-02	.5670	8.145	553.0
89	4.0000	30000	75.000	.2030-01	.1690-01	.2250-01	.9662-03	.8027-03	.1076-02	.6370	8.324	549.5
89	4.0000	32500	77.000	.3790-01	.3140-01	.4220-01	.1802-02	.1494-02	.2028-02	1.178	15.35	555.2
89	4.0000	35000	78.000	.4070-01	.3380-01	.4540-01	.1945-02	.1604-02	.2159-02	1.200	16.40	557.7
89	4.0000	37500	59.000	.2460-01	.2040-01	.2740-01	.1169-02	.9729-03	.1322-02	.7680	10.63	551.6
89	4.0000	40000	60.000	.2120-01	.1760-01	.2350-01	.1006-02	.8352-03	.1120-02	.6670	8.631	551.5
89	4.0000	42500	61.000	.1390-01	.1150-01	.1540-01	.6593-03	.5476-03	.7341-03	.4340	5.674	550.0

DATE 07 OCT 75

04-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 117

04-74 (AEDC V41B-BBA) 862C12F10M16W12/E52V8R19

(RVH001)

RUN NUMBER	TRA E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R F12SEC	H1T01 BTU/ R F12SEC	H1TAW BTU/ R F12SEC	QDOT BTU/ F12SEC	QTHOT DEG. R /SEC	TW DEC. R
89	4.0000	.45000	62 000	.9113-02	.7600-02	.1020-01	.4336-03	.3602-03	.4827-03	.2860	3.096	548.9
89	4.0000	.47500	63 000	.6811-02	.5700-02	.7600-02	.3250-03	.2704-03	.3623-03	.2150	2.730	548.3
89	4.0000	.50000	64 000	.5300-02	.4400-02	.5900-02	.2500-03	.2079-03	.2785-03	.1650	2.043	547.7
89	4.0000	.52500	65 000	.4500-02	.3900-02	.5000-02	.2151-03	.1788-03	.2395-03	.1420	1.755	548.1
89	4.0000	.55000	66 000	.4000-02	.3300-02	.4400-02	.1884-03	.1586-03	.2097-03	.1250	1.459	547.5
89	4.0000	.57500	67 000	.2600-02	.2200-02	.2900-02	.1231-03	.1023-03	.1370-03	.8100-01	9.150	547.1
89	4.0000	.60000	68 000	.1300-02	.1100-02	.1500-02	.6367-04	.5293-04	.7385-04	.4200-01	.4940	546.3
89	4.0000	.62500	69 000	.9200-03	.7000-03	.1000-02	.4117-01	.3423-04	.4591-04	.2700-01	.2040	545.6
89	4.0000	.65000	70 000	.1810-02	.1500-02	.2000-02	.6896-04	.7224-04	.9062-04	.5800-01	.5420	544.5
89	4.0000	.67500	71 000	.1400-02	.1200-02	.1600-02	.6783-04	.5639-04	.7548-04	.4500-01	.5400	546.3
89	4.0000	.70000	72 000	.3000-02	.2500-02	.3300-02	.1431-03	.1189-03	.1502-03	.9500-01	1.121	546.9
89	4.0000	.72500	73 000	.2400-02	.2000-02	.2600-02	.1118-03	.0987-04	.1244-03	.7400-01	.9650	548.2
89	4.0000	.75000	74 000	.2100-02	.1700-02	.2300-02	.9989-04	.8310-04	.1112-03	.6600-01	.8520	548.3
89	4.0000	.77500	75 000	.1700-02	.1300-02	.2000-02	.1292-03	.1074-03	.1439-03	.8500-01	1.053	548.3
89	4.0000	.80000	76 000	.1000-02	.1200-02	.1600-02	.6790-04	.5540-04	.7561-04	.4500-01	.5230	549.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 118

OH-74 (AEDC V41B-B8A) B62C12F10M15M127E52VBR19

(RV80011)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO /FT ³	MU LB SEC /FT ²
90	8.000	34.97	808.4	1344.	180.0	.0000	97.40	.8300-01	3.710	3869.	.7133-04	.7841-07

RUN NUMBER	RN/L	HREF BTU/ R	STN NO
90	X10.5	.0175	R=
90	3.519	.4758-01	.2151-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(910) BTU/ R FT2SEC	H(101) BTU/ R FT2SEC	H(TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	OTWDT DEG. R /SEC	TH DEG. R
90	1.0000	.27500	1.0000	.1550-01	.1290-01	.1730-01	.7383-03	.6136-03	.5218-03	.4880	5.350	548.1
90	1.0000	.30000	2.0000	.1390-01	.1150-01	.1540-01	.6593-03	.5485-03	.7345-03	.4370	4.623	548.0
90	1.0000	.32500	3.0000	.1120-01	.9300-02	.1250-01	.5345-03	.4442-03	.5949-03	.3540	3.625	547.7
90	1.0000	.35000	4.0000	.1290-01	.1080-01	.1440-01	.6154-03	.5115-03	.6850-03	.4070	4.211	547.9
90	1.0000	.37500	5.0000	.1740-01	.1450-01	.1940-01	.8279-03	.6879-03	.9217-03	.5470	5.729	548.4
90	1.0000	.40000	6.0000	.2060-01	.1710-01	.2290-01	.9787-03	.8131-03	.1052-02	.6460	6.615	549.2
90	1.0000	.42500	7.0000	.1390-01	.1160-01	.1730-01	.6634-03	.5512-03	.7386-03	.4390	4.528	549.2
90	1.0000	.45000	8.0000	.1930-01	.1650-01	.2220-01	.9477-03	.7873-03	.1055-02	.6250	6.357	550.1
90	1.0000	.47500	9.0000	.2330-01	.1940-01	.2600-01	.1113-02	.9240-03	.1235-02	.7300	7.403	551.4
90	1.0000	.50000	10.000	.2340-01	.1940-01	.2600-01	.1113-02	.9240-03	.1235-02	.7330	7.391	551.2
90	1.0000	.52500	11.000	.3140-01	.2610-01	.3500-01	.1495-02	.1242-02	.1667-02	.9840	9.923	552.0
90	1.0000	.55000	12.000	.3550-01	.2950-01	.3950-01	.1688-02	.1402-02	.1881-02	1.109	11.09	552.5
90	1.0000	.60000	13.000	.3010-01	.2500-01	.3360-01	.1433-02	.1189-02	.1595-02	.9390	9.459	554.2
90	1.0000	.65000	14.000	.3500-01	.2900-01	.3900-01	.1655-02	.1381-02	.1855-02	1.091	10.99	554.1
90	1.0000	.70000	15.000	.1300-01	.1080-01	.1450-01	.6182-03	.5135-03	.6684-03	.4070	3.957	550.7
90	1.0000	.75000	16.000	.5600-02	.4700-02	.6300-02	.2675-03	.2224-03	.2979-03	1.770	1.787	548.6
90	1.0000	.80000	17.000	.1500-02	.1200-02	.1600-02	.6939-04	.5765-04	.7724-04	.4600-01	44.70	548.7
90	1.0000	.85000	18.000	.1500-01	.1200-01	.1770-01	.7571-03	.6292-03	.8417-03	.5010	5.960	548.1
90	2.0000	.28500	19.000	.1500-01	.1200-01	.1730-01	.7376-03	.6132-03	.8209-03	.4880	7.49	547.4
90	2.0000	.33700	19.000	.2410-01	.2000-01	.2680-01	.1147-02	.9533-03	.1277-02	.7580	8.917	548.5
90	2.0000	.39000	20.000	.2350-01	.2000-01	.2680-01	.1119-02	.9295-03	.1244-02	.7390	8.640	549.2
90	2.0000	.42600	21.000	.2350-01	.2000-01	.2680-01	.1119-02	.9295-03	.1244-02	.7390	8.640	549.2
90	2.0000	.47800	22.000	.2970-01	.2470-01	.3300-01	.1412-02	.1173-02	.1572-02	.9310	10.34	550.2

DATE 07 OCT 75

OH-74 (ALOC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 119

OH-74 (ALOC V41B-B8A) B62C12F10H16H127E52VBR19

(RV8001)

RUN NUMBER	TQA.E	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAW	H1GTO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TW DEG. R
90	2.0000	.53000	23.000	.3430-01	.2890-01	.3890-01	.1659-02	.1377-02	.1848-02	1.089	12.07	553.6
90	2.0000	.56700	24.000	.2710-01	.2250-01	.3020-01	.1291-02	.1072-02	.1438-02	.8500	9.198	551.5
90	2.0000	.62000	25.000	.1780-01	.1480-01	.1980-01	.6457-03	.7034-03	.9428-03	.5590	6.049	550.2
90	2.0000	.67000	26.000	.8200-02	.6600-02	.8800-02	.3793-03	.3145-03	.4209-03	.2510	2.722	546.6
90	2.0000	.70500	27.000	.6400-02	.5300-02	.7100-02	.3023-03	.2514-03	.3364-03	.2010	2.157	545.9
90	2.0000	.75000	28.000	.3000-02	.2500-02	.3400-02	.1449-03	.1206-03	.1612-03	.2600-01	1.058	544.6
90	2.0000	.80000	29.000	.2300-02	.1900-02	.2500-02	.1079-03	.8971-04	.1201-03	.7200-01	.7880	546.5
90	2.0000	.82400	30.000	.1300-02	.1100-02	.1500-02	.6292-04	.5230-04	.7004-04	.4200-01	.5780	548.1
90	3.0000	.20000	31.000	.3290-01	.2730-01	.3670-01	.1326-02	.1101-02	.1478-02	1.020	10.75	557.4
90	3.0000	.22500	32.000	.2730-01	.2310-01	.3110-01	.1326-02	.1101-02	.1478-02	.8690	9.694	554.1
90	3.0000	.25000	33.000	.2160-01	.1790-01	.2400-01	.1026-02	.8525-03	.1143-02	.6760	7.545	550.7
90	3.0000	.27500	34.000	.1690-01	.1400-01	.1880-01	.8017-03	.6653-03	.8923-03	5.300	6.339	548.1
90	3.0000	.30000	35.000	.1400-01	.1160-01	.1560-01	.6659-03	.5537-03	.7410-03	4.420	5.459	546.5
90	3.0000	.32500	36.000	.2030-01	.1690-01	.2260-01	.9653-03	.8033-03	.1075-02	6.400	7.487	547.6
90	3.0000	.35000	37.000	.2830-01	.2350-01	.3150-01	.1345-02	.1118-02	.1497-02	.8890	10.29	548.7
90	3.0000	.37500	38.000	.2700-01	.2240-01	.3070-01	.1283-02	.1057-02	.1429-02	8.490	9.919	548.9
90	3.0000	.40000	39.000	.2110-01	.1750-01	.2340-01	.1002-02	.8328-03	.1115-02	.6630	7.794	548.3
90	3.0000	.42500	40.000	.3920-01	.3170-01	.4260-01	.1818-02	.1509-02	.2025-02	1.193	14.07	553.4
90	3.0000	.45000	41.000	.3010-01	.2500-01	.3350-01	.1432-02	.1189-02	.1594-02	.9450	10.76	549.8
90	3.0000	.47500	42.000	.3150-01	.2610-01	.3500-01	.1497-02	.1243-02	.1667-02	.9850	10.93	551.5
90	3.0000	.50000	43.000	.2650-01	.2200-01	.2950-01	.1260-02	.1046-02	.1403-02	.8300	9.214	550.7
90	3.0000	.52500	44.000	.1650-01	.1370-01	.1840-01	.7845-03	.6520-03	.8733-03	.5190	6.072	548.2
90	3.0000	.55000	45.000	.1310-01	.1090-01	.1450-01	.6251-03	.5195-03	.6957-03	.4140	4.602	547.5
90	3.0000	.57000	46.000	.7600-02	.6400-02	.8500-02	.3633-03	.3021-03	.4043-03	.2410	2.616	546.2
90	3.0000	.60000	47.000	.5200-02	.4300-02	.5700-02	.2451-03	.2038-03	.2727-03	.1630	1.726	545.3
90	3.0000	.65000	48.000	.3100-02	.2600-02	.3400-02	.1458-03	.1221-03	.1633-03	.9800-01	1.077	544.3
90	3.0000	.70000	49.000	.2500-02	.2100-02	.2800-02	.1185-03	.9855-04	.1319-03	.7900-01	.8580	543.9
90	3.0000	.75000	50.000	.2000-02	.1700-02	.2300-02	.9832-04	.8013-04	.1071-03	.6400-01	.6860	544.5
90	3.0000	.80000	51.000	.1400-02	.1200-02	.1600-02	.6558-04	.5534-04	.7411-04	.4400-01	.5440	548.3
90	3.0000	.85000	52.000	.1900-02	.1600-02	.2100-02	.9261-04	.7528-04	.1009-03	.6000-01	.7380	549.4
90	3.0000	.87500	53.000	.1500-02	.1300-02	.1700-02	.7361-04	.6115-04	.8196-04	.4900-01	.6740	549.7
90	3.0000	.90000	54.000	.1900-02	.1600-02	.2200-02	.6245-04	.7680-04	.1029-03	.6100-01	.7370	550.1
90	3.0000	.92500	55.000	.3500-01	.2900-01	.4300-02	.1848-03	.1535-03	.2058-03	.1220	1.230	550.4
90	4.0000	.20000	71.000	.2760-01	.2390-01	.3910-01	.1666-02	.1360-02	.1860-02	1.079	12.20	562.7
90	4.0000	.22500	72.000	.2760-01	.2390-01	.3910-01	.1315-02	.1091-02	.1457-02	.8570	9.984	557.8
90	4.0000	.25000	73.000	.2190-01	.1820-01	.2440-01	.1042-02	.8647-03	.1151-02	.6930	7.963	554.5
90	4.0000	.27500	74.000	.2500-01	.2090-01	.2790-01	.1191-02	.9884-03	.1328-02	.7900	9.599	555.0
90	4.0000	.30000	75.000	.2390-01	.1980-01	.2650-01	.1133-02	.9413-03	.1212-02	.7460	9.746	551.1
90	4.0000	.32500	76.000	.2730-01	.2300-01	.3670-01	.1566-02	.1299-02	.1745-02	1.025	13.37	554.6
90	4.0000	.35000	77.000	.2390-01	.1990-01	.2650-01	.1139-02	.9443-03	.1268-02	.7480	9.758	552.0
90	4.0000	.37500	78.000	.2500-01	.2200-01	.3000-01	.1281-02	.1051-02	.1426-02	.8420	10.39	551.9
90	4.0000	.40000	79.000	.2500-01	.2200-01	.3000-01	.9754-03	.9111-03	.1087-02	.6440	9.409	550.4
90	4.0000	.42500	80.000	.1180-01	.9900-02	.1310-01	.5590-03	.4646-03	.6223-03	.3700	4.833	549.4

DATE 07 OCT 75

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 120

(RVB001)

04-74 (AEDC V41B-88A) E62C12F10M16W127E52V8R19

RUN NUMBER	TRAE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R F125EC	H1T01 BTU/ R F125EC	H(TAW) BTU/ R F125EC	QDOT BTU/ F125EC	DTWOT DEG. R /SEC	TH DEG. R
90	4.0000	.45000	62.000	.8000-02	.6600-02	.8900-02	.3798-03	.3157-03	.4227-03	.2510	3.251	547.5
90	4.0000	.47500	63.000	.6700-02	.5600-02	.7500-02	.3207-03	.2666-03	.3569-03	.2120	2.701	547.1
90	4.0000	.50000	64.000	.5100-02	.4200-02	.5700-02	.2430-03	.2020-03	.2704-03	.1610	1.990	547.0
90	4.0000	.52500	65.000	.4100-02	.3400-02	.4600-02	.1950-03	.1621-03	.2170-03	.1290	1.598	546.8
90	4.0000	.55000	66.000	.3300-02	.2800-02	.3700-02	.1579-03	.1313-03	.1757-03	.1050	1.227	546.3
90	4.0000	.60000	67.000	.1800-02	.1500-02	.2000-02	.8483-04	.7054-04	.9438-04	.5600-01	.6330	545.9
90	4.0000	.65000	68.000	.1200-02	.1000-02	.1400-02	.5836-04	.4854-04	.6493-04	.3900-01	.4540	545.1
90	4.0000	.70000	69.000	.1700-02	.1400-02	.1900-02	.8153-04	.6780-04	.7771-04	.5400-01	.6020	545.6
90	4.0000	.75000	70.000	.2000-02	.1700-02	.2300-02	.9624-04	.8006-04	.971-03	.5400-01	.7130	544.5
90	4.0000	.80000	75.000	.6000-03	.5000-03	.7000-03	.3074-04	.2557-04	.3421-04	.2000-01	.2460	545.8
90	4.0000	.85000	76.000	.1700-02	.1400-02	.1900-02	.8243-04	.6853-04	.9173-04	.5500-01	.6460	547.0
90	4.0000	.87500	77.000	.1400-02	.1200-02	.1600-02	.6767-04	.5625-04	.7531-04	.4500-01	.5860	547.5
90	4.0000	.90000	78.000	.1200-02	.1000-02	.1300-02	.5611-04	.4664-04	.6245-04	.3700-01	.4800	548.1
90	4.0000	.92500	79.000	.2600-02	.2100-02	.2800-02	.1215-03	.1010-03	.1353-03	.8000-01	.9910	549.2
90	4.0000	.95000	80.000	.4200-02	.3500-02	.4600-02	.1977-03	.1643-03	.2202-03	.1300	1.524	550.2

04-74 (AEDC V41B-BBA) B62C12F10H16W127E52VBR19

(R79031)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
91	8.000	39.96	806.7	1346.	180.0	.0000	97.50	.8300-01	3.702	3871.	.7108-04	.7353-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R .0175
91	3.504	.751-01	.2155-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H(10) BTU/ R FT ² SEC	H(10) BTU/ P FT ² SEC	QDOT BTU/ R FT ² SEC	QDOT BTU/ P FT ² SEC	DTWDT DEG. R /SEC	TW DEG. R
91	1.0000	.27500	1.0000	.1520-01	.1270-01	.1700-01	.7244-03	.6023-03	.4810	.4972	4.972	547.3
91	1.0000	.30000	2.0000	.1290-01	.1070-01	.1440-01	.5140-03	.5105-03	.4080	.4317	4.317	547.5
91	1.0000	.32500	3.0000	.1200-01	.1000-01	.1330-01	.5703-03	.4742-03	.3790	.3681	3.681	547.5
91	1.0000	.35000	4.0000	.1870-01	.1550-01	.2080-01	.8692-03	.7391-03	.5890	.6094	6.094	548.3
91	1.0000	.37500	5.0000	.1690-01	.1410-01	.1880-01	.8051-03	.6692-03	.5340	.5596	5.596	548.5
91	1.0000	.40000	6.0000	.1770-01	.1480-01	.1970-01	.8436-03	.7013-03	.5600	.5733	5.733	548.1
91	1.0000	.42500	7.0000	.1840-01	.1530-01	.2050-01	.8755-03	.7285-03	.5810	.6002	6.002	548.3
91	1.0000	.45000	8.0000	.2940-01	.2440-01	.3270-01	.1339-02	.1161-02	.9340	9.418	9.418	550.1
91	1.0000	.47500	9.0000	.3110-01	.2610-01	.3500-01	.1494-02	.1241-02	.9870	10.00	10.00	551.0
91	1.0000	.50000	10.000	.2520-01	.2090-01	.2800-01	.1195-02	.9937-03	.7910	.7983	7.983	550.2
91	1.0000	.52500	11.000	.3590-01	.3060-01	.4100-01	.1751-02	.1455-02	.1156	.1167	1.167	551.1
91	1.0000	.55000	12.000	.4010-01	.3330-01	.4460-01	.1935-02	.1593-02	.1257	.1257	1.257	551.9
91	1.0000	.50000	13.000	.3950-01	.3290-01	.4410-01	.1891-02	.1553-02	.1277	.1246	1.246	554.4
91	1.0000	.50000	14.000	.2000-01	.1660-01	.2230-01	.9523-03	.7912-03	.6300	6.354	6.354	550.4
91	1.0000	.70000	15.000	.5900-02	.4820-02	.6500-02	.2765-03	.2299-03	.1830	.1789	1.789	547.3
91	1.0000	.50000	16.000	.2300-02	.1900-02	.2500-02	.1095-03	.9023-04	.7200-01	.7300	7.300	546.0
91	1.0000	.80000	17.000	.2600-02	.2200-02	.2900-02	.1239-03	.1030-03	.8000-01	.7950	7.950	547.4
91	2.0000	.29500	18.000	.1520-01	.1260-01	.1690-01	.7203-03	.5932-03	.4780	.5597	5.597	547.5
91	2.0000	.33700	19.000	.2120-01	.1710-01	.2360-01	.1009-02	.8322-03	.6700	7.889	7.889	547.3
91	2.0000	.39000	20.000	.1990-01	.1660-01	.2220-01	.9461-03	.7871-03	.6290	7.395	7.395	547.5
91	2.0000	.42600	21.000	.2710-01	.2080-01	.3080-01	.1762-02	.1404-02	.1164	.1361	1.361	550.7
91	2.0000	.47800	22.000	.3410-01	.2830-01	.3790-01	.1620-02	.1346-02	.1073	.1192	1.192	549.2

(R18001)

OH-74 (AEOC V41B-BBA) B62C12F1016H127E52VBR19

RUN NUMBER	TQA, E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAK	H19TO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QOOT BTU/ R FT2SEC	DTAOT DEG. R /SEC	TW DEG. R
91	2.0000	.53200	23.000	.3650-01	.3040-01	.4070-01	.1737-02	.1443-02	.1934-02	1.147	12.73	551.3
91	2.0000	.56700	24.000	.2270-01	.1880-01	.2520-01	.1077-02	.8953-03	.1199-02	.7130	7.727	549.6
91	2.0000	.52000	25.000	.1080-01	.9000-02	.1200-01	.5122-03	.4259-03	.5700-03	.3400	3.690	547.3
91	2.0000	.67000	26.000	.7200-02	.6000-02	.8000-02	.3425-03	.2850-03	.3810-03	.2280	2.479	545.2
91	2.0000	.70500	27.000	.3500-02	.2900-02	.3900-02	.1671-03	.1391-03	.1859-03	.1110	1.199	544.4
91	2.0000	.75000	28.000	.2900-02	.2400-02	.3200-02	.1383-03	.1151-03	.1538-03	.9200-01	1.015	543.3
91	2.0000	.80000	29.000	.3000-02	.2500-02	.3300-02	.1411-03	.1174-03	.1570-03	.9400-01	1.037	544.8
91	2.0000	.82400	30.000	.1300-02	.1000-02	.1400-02	.5981-04	.4973-04	.6655-04	.4000-01	.5520	547.1
91	3.0000	.31.000	31.000	.3330-01	.2760-01	.3710-01	.1581-02	.1311-02	.1762-02	1.035	10.91	556.9
91	3.0000	.22500	32.000	.2730-01	.2270-01	.3040-01	.1297-02	.1077-02	.1445-02	.8530	9.508	553.6
91	3.0000	.25000	33.000	.2120-01	.1760-01	.2360-01	.1006-02	.8362-03	.1121-02	.6650	7.422	550.5
91	3.0000	.27500	34.000	.1590-01	.1320-01	.1770-01	.7558-03	.6284-03	.8410-03	.5320	5.999	547.5
91	3.0000	.30000	35.000	.1630-01	.1400-01	.1880-01	.8023-03	.6672-03	.8926-03	.5330	6.593	546.6
91	3.0000	.32500	36.000	.2850-01	.2370-01	.3170-01	.1354-02	.1126-02	.1507-02	.8990	10.52	547.7
91	3.0000	.35000	37.000	.2780-01	.2310-01	.3100-01	.1323-02	.1100-02	.1472-02	.8780	10.17	547.7
91	3.0000	.37500	38.000	.2060-01	.1720-01	.2300-01	.0911-03	.8159-03	.1092-02	.1520	7.638	546.5
91	3.0000	.40000	39.000	.3230-01	.2680-01	.3590-01	.1535-02	.1276-02	.1709-02	1.018	11.98	547.8
91	3.0000	.42500	40.000	.3790-01	.3150-01	.4220-01	.1803-02	.1498-02	.2008-02	1.190	14.04	551.6
91	3.0000	.45000	41.000	.3520-01	.2930-01	.3920-01	.1674-02	.1391-02	.1863-02	1.109	12.65	548.6
91	3.0000	.47500	42.000	.3570-01	.2960-01	.3970-01	.1696-02	.1409-02	.1899-02	1.122	12.45	550.2
91	3.0000	.50000	43.000	.2330-01	.1940-01	.2600-01	.1109-02	.9219-03	.1235-02	.7350	8.170	549.5
91	3.0000	.52500	44.000	.1260-01	.1050-01	.1400-01	.5983-03	.4977-03	.6656-03	.3980	4.669	545.4
91	3.0000	.55000	45.000	.1020-01	.8500-02	.1140-01	.4867-03	.4049-03	.5414-03	.3240	3.608	545.4
91	3.0000	.60000	46.000	.6220-02	.5200-02	.6900-02	.2963-03	.2456-03	.3296-03	.1980	2.148	544.2
91	3.0000	.65000	47.000	.4000-02	.3300-02	.4500-02	.1905-03	.1585-03	.2112-03	.1270	1.350	543.5
91	3.0000	.70000	48.000	.2500-02	.2100-02	.2800-02	.1190-03	.9819-04	.1312-03	.7900-01	6.700	543.2
91	3.0000	.75000	49.000	.2800-02	.2300-02	.3100-02	.1323-03	.1101-03	.1471-03	.8600-01	.9520	542.9
91	3.0000	.80000	50.000	.3000-02	.2500-02	.3300-02	.1425-03	.1185-03	.1584-03	.9500-01	1.019	543.6
91	3.0000	.85000	51.000	.2200-02	.1800-02	.2400-02	.1043-03	.8674-04	.1181-03	.6300-01	.8550	547.6
91	3.0000	.90000	52.000	.1900-02	.1500-02	.2100-02	.9041-04	.7516-04	.1006-03	.5200-01	.7400	549.4
91	3.0000	.92500	53.000	.2500-02	.2100-02	.2800-02	.1181-03	.9819-04	.1315-03	.7600-01	1.085	549.2
91	3.0000	.95000	54.000	.4700-02	.3900-02	.5200-02	.2213-03	.1839-03	.2464-03	.1450	1.911	550.4
91	3.0000	.96000	55.000	.6000-02	.5500-02	.7400-02	.3158-03	.2524-03	.3516-03	.2090	2.108	550.4
91	4.0000	.20000	56.000	.3490-01	.2880-01	.3880-01	.1553-02	.1369-02	.1844-02	1.074	12.15	562.0
91	4.0000	.25000	57.000	.2750-01	.2280-01	.3070-01	.1307-02	.1084-02	.1457-02	.8540	9.949	557.7
91	4.0000	.25000	73.000	.2530-01	.2100-01	.2820-01	.1201-02	.9955-03	.1338-02	.7880	9.182	555.6
91	4.0000	.27500	74.000	.2850-01	.2370-01	.3190-01	.1356-02	.1125-02	.1511-02	.8900	10.95	555.4
91	4.0000	.30000	56.000	.2950-01	.2450-01	.3290-01	.1402-02	.1155-02	.1502-02	.9250	12.08	551.5
91	4.0000	.32500	57.000	.2740-01	.2270-01	.3050-01	.1302-02	.1091-02	.1450-02	.8580	11.20	552.1
91	4.0000	.35000	58.000	.2580-01	.2140-01	.2870-01	.1285-02	.1019-02	.1365-02	.9790	10.57	551.2
91	4.0000	.37500	59.000	.3120-01	.2600-01	.3480-01	.1485-02	.1234-02	.1954-02	.99.0	12.90	551.3
91	4.0000	.40000	60.000	.1770-01	.1470-01	.1960-01	.9391-03	.6974-03	.9340-03	.5560	7.269	548.8
91	4.0000	.42500	61.000	.1130-01	.9400-02	.1260-01	.5295-03	.4487-03	.6003-03	.3590	4.593	546.8

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA CN ORBITER FUSELAGE PORT SIDE

PAGE 123

(RVD0101)

OH-74 (AEDC V41B-BBA) B62C12F10M16W127E52VBR13

RUN NUMBER	TIME	X/L	T/C 1/0	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H(1TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAH) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
91	4.0000	45000	62.000	.8900-02	.7400-02	.1000-01	.4252-03	.3535-03	.4730-03	.2830	3.659	546.3
91	4.0000	47500	63.000	.6700-02	.5600-02	.7400-02	.3175-03	.2644-03	.3535-03	.2120	2.692	545.5
91	4.0000	50000	64.000	.4700-02	.3900-02	.5200-02	.2214-03	.1842-03	.2463-03	.1470	1.824	545.3
91	4.0000	52500	65.000	.3700-02	.3100-02	.4200-02	.1732-03	.1482-03	.1982-03	.1190	1.468	545.3
91	4.0000	55000	66.000	.2900-02	.2300-02	.3100-02	.1323-03	.1101-03	.1472-03	.6500-01	1.033	544.9
91	4.0000	58000	67.000	.1500-02	.1200-02	.1600-02	.6934-04	.5759-04	.7712-04	.4600-01	.5200	544.3
91	4.0000	60000	68.000	.2000-02	.1700-02	.2200-02	.9539-04	.7937-04	.1061-03	.5400-01	.7460	544.5
91	4.0000	62000	69.000	.1100-02	.9000-03	.1200-02	.5081-04	.4228-04	.5651-04	.3400-01	.3780	543.9
91	4.0000	64000	70.000	.2500-02	.2100-02	.2800-02	.1194-03	.9938-04	.1328-03	.8000-01	.8880	544.1
91	4.0000	66000	71.000	.1500-02	.1300-02	.1700-02	.7343-04	.6107-04	.8169-04	.4900-01	.5890	546.0
91	4.0000	68000	72.000	.5000-03	.4000-03	.5000-03	.2323-04	.1932-04	.2584-04	.1500-01	.1830	546.5
91	4.0000	70000	73.000	.1100-02	.9000-03	.1200-02	.5093-04	.4235-04	.5667-04	.3400-01	.4430	547.3
91	4.0000	72000	74.000	.2200-02	.1800-02	.2500-02	.1054-03	.8757-04	.1173-03	.7000-01	.9020	548.8
91	4.0000	74000	75.000	.4800-02	.4000-02	.5300-02	.2264-03	.1881-03	.2520-03	.1500	1.846	550.4
91	4.0000	76000	76.000	.7500-02	.6300-02	.8400-02	.3599-03	.2989-03	.4007-03	.2380	2.776	551.2

CH-74 (AEDC 41P-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RYE001)

CH-74 (AEDC 441B-DBA) B62C12F10M16H127E52VBR19

RUN NUMBER	TRA E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T01 BTU/R FT2SEC	H1T01 BTU/R FT2SEC	H1TAN BTU/R FT2SEC	QDOT BTU/ FT2SEC	D1WOT DEG. R /SEC	TW DEG. R
92	2.0000	.53000	23.000	.2640-01	.2190-01	.2940-01	.1256-02	.1044-02	.1388-02	.8340	9.267	549.0
92	2.0000	.56700	24.000	.1550-01	.1290-01	.1730-01	.7379-03	.6138-03	.8209-03	.4920	5.337	546.7
92	2.1000	.62000	25.000	.7200-02	.6000-02	.8100-02	.3448-03	.2870-03	.3875-03	.2300	2.503	545.0
92	2.0000	.67000	26.000	.4000-02	.3300-02	.4400-02	.1897-03	.1579-03	.2109-03	.1270	1.381	543.5
92	2.0000	.70500	27.000	.2300-02	.1900-02	.2600-02	.1105-03	.9198-04	.1228-03	.7400-01	.7970	543.0
92	2.0000	.75000	28.000	.4300-02	.3600-02	.4700-02	.2030-03	.1690-03	.2257-03	.1360	1.494	542.8
92	2.0000	.80000	29.000	.3700-02	.3100-02	.4100-02	.1775-03	.1477-03	.1973-03	.1190	1.309	544.1
92	2.0000	.82400	30.000	.1400-02	.1200-02	.1500-02	.6893-04	.5735-04	.7367-04	.4600-01	.8400	545.7
92	3.0000	.20000	31.000	.3260-01	.2700-01	.3630-01	.1549-02	.1286-02	.1726-02	1.019	10.74	555.7
92	3.0000	.22500	32.000	.2650-01	.2210-01	.2960-01	.1256-02	.1052-02	.1411-02	.8360	9.310	553.4
92	3.0000	.25000	33.000	.2140-01	.1780-01	.2360-01	.1019-02	.8467-03	.1135-02	.5750	7.529	551.0
92	3.0000	.27500	34.000	.1730-01	.1430-01	.1930-01	.9677-03	.8048-03	.1077-02	.5480	6.553	548.3
92	2.0000	.30000	35.000	.2030-01	.1690-01	.2260-01	.1827-03	.1657-03	.2177-03	.6450	7.967	547.0
92	3.0000	.32500	36.000	.2920-01	.2420-01	.3240-01	.1153-02	.1543-02	.1930-02	.9220	10.79	548.1
92	3.0000	.35000	37.000	.2420-01	.2010-01	.2690-01	.1151-02	.9574-03	.1281-02	.7670	8.879	547.4
92	3.0000	.37500	38.000	.2760-01	.2300-01	.3070-01	.1213-02	.1092-02	.1461-02	.8740	10.23	547.8
92	3.0000	.40000	39.000	.3770-01	.3130-01	.4190-01	.1793-02	.1491-02	.1995-02	1.191	14.01	548.6
92	3.0000	.42500	40.000	.3070-01	.3070-01	.4120-01	.1759-02	.1462-02	.1959-02	1.166	13.76	548.8
92	3.0000	.45000	41.000	.3690-01	.3070-01	.4110-01	.1756-02	.1460-02	.1955-02	1.167	13.30	548.8
92	3.0000	.47500	42.000	.2980-01	.2480-01	.3310-01	.1417-02	.1178-02	.1577-02	.9420	10.46	548.6
92	3.0000	.50000	43.000	.1480-01	.1230-01	.1640-01	.7021-03	.5840-03	.7810-03	.4690	5.212	546.1
92	3.0000	.52500	44.000	.9100-02	.7600-02	.1010-01	.4328-03	.3602-03	.4813-03	.2394	2.493	544.2
92	3.0000	.55000	45.000	.7000-02	.5800-02	.7800-02	.3342-03	.2782-03	.3716-03	.2240	2.493	543.7
92	3.0000	.60000	46.000	.4500-02	.3600-02	.5100-02	.2189-03	.1822-03	.2434-03	.1470	1.595	543.1
92	3.0000	.65000	47.000	.3100-02	.2500-02	.3400-02	.1453-03	.1210-03	.1615-03	.9800-01	1.035	542.0
92	3.0000	.70000	48.000	.2100-02	.1700-02	.2300-02	.9501-04	.8245-04	.1101-03	.6600-01	.7340	541.9
92	3.0000	.75000	49.000	.4000-02	.3300-02	.4400-02	.1891-03	.1575-03	.2102-03	.1270	1.380	542.5
92	3.0000	.80000	50.000	.3200-02	.2700-02	.3600-02	.1541-03	.1283-03	.1713-03	.1030	1.105	543.3
92	3.0000	.85000	51.000	.1500-02	.1200-02	.1600-02	.7031-04	.5849-04	.7522-04	.4700-01	.5800	546.4
92	3.0000	.87500	52.000	.2900-02	.2400-02	.3100-02	.8889-04	.7391-04	.9590-04	.5000-01	.7310	547.5
92	3.0000	.90000	53.000	.2300-02	.1900-02	.2600-02	.1397-03	.1161-03	.1594-03	.9300-01	1.289	548.7
92	3.0000	.92500	54.000	.4600-02	.3700-02	.5000-02	.2133-03	.1773-03	.2374-03	.1420	1.650	549.6
92	3.0000	.95000	55.000	.4200-02	.3500-02	.4700-02	.1995-03	.1659-03	.2221-03	.1320	1.339	549.4
92	4.0000	.20000	71.000	.3400-01	.2800-01	.3790-01	.1617-02	.1341-02	.1804-02	1.056	11.96	556.7
92	4.0000	.22500	72.000	.2950-01	.2470-01	.3180-01	.1359-02	.1127-02	.1513-02	.8910	10.39	555.7
92	4.0000	.25000	73.000	.2770-01	.2300-01	.3080-01	.1317-02	.1093-02	.1467-02	.8560	10.10	555.4
92	4.0000	.27500	74.000	.2990-01	.2470-01	.3320-01	.1417-02	.1177-02	.1579-02	.9330	11.48	555.0
92	4.0000	.30000	75.000	.3230-01	.2690-01	.3600-01	.1539-02	.1277-02	.1730-02	1.016	13.26	552.4
92	4.0000	.32500	76.000	.2650-01	.2200-01	.2950-01	.1259-02	.1046-02	.1402-02	.8330	10.87	551.9
92	4.0000	.35000	77.000	.3030-01	.2560-01	.3430-01	.1464-02	.1216-02	.1631-02	.9680	12.64	552.1
92	4.0000	.37500	78.000	.3330-01	.2770-01	.3710-01	.1585-02	.1317-02	.1765-02	1.049	13.70	551.3
92	4.0000	.40000	79.000	.1800-01	.1500-01	.2000-01	.9569-03	.7125-03	.9535-03	.5700	7.454	548.1
92	4.0000	.42500	80.000	.1230-01	.1010-01	.1350-01	.5748-03	.4615-03	.6439-03	.3860	5.053	546.3

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 26

04-74 (AEDC V41B-B8A) B62C12F10M16M127E52V8R19

(RV8001)

RUN NUMBER	TRA-E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H(101) BTU/ R FT2SEC	H(101) BTU/ R FT2SEC	H(TAW) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWDT SEC	TR DEG. R
92	4.0000	.45000	52.000	.8600-02	.7200-02	.9600-02	.4103-03	.3414-03	.4564-03	.2740	3.548	545.2
92	4.0000	.47500	63.000	.5400-02	.4500-02	.6000-02	.2583-03	.2150-03	.2872-03	.1730	2.200	544.1
92	4.0000	.50000	64.000	.3800-02	.3200-02	.4300-02	.1832-03	.1525-03	.2037-03	.1730	1.518	543.8
92	4.0000	.52500	65.000	.2600-02	.2100-02	.2900-02	.1228-03	.1022-03	.1365-03	.8200-01	1.018	543.6
92	4.0000	.55000	66.000	.2500-02	.2100-02	.2700-02	.1172-03	.9759-04	.1304-03	.7900-01	.9210	543.6
92	4.0000	.60000	67.000	.1600-02	.1300-02	.1800-02	.7611-04	.6337-04	.8462-04	.5100-01	.5740	543.0
92	4.0000	.65000	68.000	.1500-02	.1200-02	.1600-02	.7028-04	.5851-04	.7814-04	.4700-01	.5520	543.2
92	4.0000	.70000	69.000	.1700-02	.1400-02	.1900-02	.8253-04	.6872-04	.9175-04	.5500-01	.6170	542.7
92	4.0000	.75000	70.000	.3100-02	.2600-02	.3500-02	.1483-03	.1234-03	.1649-03	.9800-01	1.106	543.8
92	4.0000	.80000	75.000	.1600-02	.1300-02	.1800-02	.7531-04	.6265-04	.8373-04	.5000-01	.6040	546.1
92	4.0000	.85000	76.000	.1370-02	.1090-02	.1400-02	.5999-04	.4989-04	.6674-04	.4000-01	.4730	547.1
92	4.0000	.87500	77.000	.1200-02	.1000-02	.1300-02	.5729-04	.4764-04	.6375-04	.3800-01	.4430	547.8
92	4.0000	.90000	78.000	.2400-02	.2000-02	.2700-02	.1164-03	.9676-04	.1255-03	.7700-01	.9980	549.4
92	4.0000	.92500	79.000	.5600-02	.4600-02	.6200-02	.2653-03	.2205-03	.2954-03	.1760	2.168	550.7
92	4.0000	.95000	80.000	.7700-02	.6400-02	.8600-02	.3663-03	.3043-03	.4079-03	.2470	2.831	551.5

PA. 17

1000000

PARAMETRIC DATA

ALPHA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	B PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU -B-SEC /FT ²
64	8.000	19.80	863.8	134.1	-179.9	.0000	97.20	.8800-01	3.964	3884.	.7640-04	.7623-07

...TEST DATA...

RUN	TRACE	X/L	T/C °C	M. REF. S=0.0	H/REF P=1.0	H/REF P=1.1	H19101 B*U/ R F*2SEC	H1101 B*U/ R F*2SEC	H17A1 B*U/ R F*2SEC	Q201 B*U/ R F*2SEC	DT=DT1 SEC.	IN DEC.
64	1.0000	.27500	1.0000	1.50-01	.9900-02	.1320-01	5.025-03	.4842-03	.6463-03	3.390	3.390	5.65.5
64	1.0000	.30000	2.0000	1.00-01	9100-02	.1320-01	.5339-03	.4479-03	.5958-03	3.500	3.763	5.65.3
64	1.0000	.32500	3.0000	.9700-02	.7200-02	.9700-02	.4067-03	.3547-03	.4749-03	.2800	2.894	5.65.7
64	1.0000	.35000	4.0000	.9200-02	.7700-02	.1030-01	.4547-03	.3781-03	.5063-03	3.010	3.114	5.65.5
64	1.0000	.37500	5.0000	.9000-02	.7500-02	.1010-01	.4472-03	.3718-03	.4977-03	.2950	3.103	5.66.3
64	1.0000	.40000	6.0000	1.10-01	9200-02	.1240-01	5.080-03	.4555-03	.5059-03	3.320	3.715	5.66.2
64	1.0000	.42500	7.0000	1.00-01	.8400-02	.1130-01	.4190-03	.1148-03	.5545-03	.3000	3.413	5.66.1
64	1.0000	.45000	8.0000	.0500-01	.1300-01	.1840-01	.8109-03	.6744-03	.5040-03	.3000	3.464	5.66.6
64	1.0000	.47500	9.0000	.1700-01	.1400-01	.1950-01	.8624-03	.7155-03	.5240-03	.5000	5.771	5.67.8
64	1.0000	.50000	10.0000	.1500-01	.1700-01	.1780-01	.7855-03	.6510-03	.4374-03	.5190	5.245	5.67.8
64	1.0000	.52500	11.0000	.1600-01	.1700-01	.1820-01	.8050-03	.5599-03	.4374-03	.5320	5.331	5.67.4
64	1.0000	.55000	12.0000	.2000-01	.1600-01	.2450-01	.9945-03	.9255-03	1.07-02	.6500	6.571	5.67.4
64	1.0000	.57500	13.0000	.2200-01	.1600-01	.2650-01	.1114-02	.5211-03	.1240-02	.7300	7.294	5.67.4
64	1.0000	.60000	14.0000	.2200-01	.2500-01	.2500-01	.1337-02	.1111-02	.4400-02	.9300	8.875	5.69.4
64	1.0000	.62500	15.0000	.3400-01	.2500-01	.3100-01	.1694-02	.1446-02	.1230-02	1.110	10.300	5.69.3
64	1.0000	.65000	16.0000	.5220-01	.4300-01	.5820-01	.2011-02	.2122-02	.2580-02	1.604	15.95	5.69.3
64	1.0000	.67500	17.0000	.5100-01	.4200-01	.5760-01	.2044-02	.2100-02	.2580-02	1.604	15.94	5.69.3
64	1.0000	.70000	18.0000	.3000-01	.4000-01	.3900-01	.5047-03	.4008-03	.5544-03	2.000	4.561	5.69.3
64	1.0000	.72500	19.0000	.2000-01	.3000-01	.2800-01	.3240-03	.4439-03	.4340-03	.7200	4.147	5.69.3
64	1.0000	.75000	20.0000	1.10-01	.2000-01	.1340-01	.4534-03	.4911-03	.6234-03	.3300	4.494	5.69.3
64	1.0000	.77500	21.0000	.3000-01	.4000-01	.4000-01	.5000-03	.3700-03	.1230-03	.7200	4.493	5.69.3
64	1.0000	.80000	22.0000	.3000-01	.4000-01	.4000-01	.5000-03	.3700-03	.1230-03	.7200	4.493	5.69.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 129

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

(RVBC011)

QRY NUMBER	TRAIE	Y/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT2SEC	(T01) 5'U/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG R /SEC	IN INCH R
64	2.0000	53000	23.000	.2840-01	.2330-01	.3160-01	.1396-02	.1159-02	.1544-02	.0115	10.15	551.3
64	2.0000	56700	24.000	.3360-01	.2790-01	.3740-01	.1651-02	.1370-02	.1770-02	.001	11.61	562.4
64	2.0000	62000	25.000	.5190-01	.4700-01	.5780-01	.2780-02	.2115-02	.2840-02	1.664	17.99	594.3
64	2.0000	67000	26.000	.6750-01	.5590-01	.7540-01	.3319-02	.2746-02	.3705-02	2.135	22.98	563.5
64	2.0000	70500	27.000	.4610-01	.3820-01	.5140-01	.2266-02	.1879-02	.2526-02	1.474	15.76	556.6
64	2.0000	75000	28.000	.2270-01	.1880-01	.2530-01	.1115-02	.9265-03	.1241-02	.7350	8.045	548.1
64	2.0000	80000	29.000	.1730-01	.1440-01	.1920-01	.8494-03	.7059-03	.9456-03	.5600	6.169	547.3
64	2.0000	82400	30.000	.5900-02	.4900-02	.6600-02	.2919-03	.2427-03	.3249-03	15.	2.683	546.1
64	3.0000	20000	31.000	.2820-01	.2340-01	.3140-01	.1385-02	.1150-02	.1544-02	.1260	9.508	552.9
64	3.0000	22500	32.000	.2220-01	.1840-01	.2480-01	.1093-02	.9069-03	.1217-02	.7160	7.983	551.7
64	3.0000	25000	33.000	.1710-01	.1420-01	.1900-01	.8384-03	.6963-03	.9337-03	.5510	6.151	549.7
64	3.0000	27500	34.000	.1340-01	.1110-01	.1490-01	.6595-03	.5480-03	.7342-03	.4350	5.195	548.0
64	3.0000	30000	35.000	.1120-01	.9300-02	.1250-01	.5506-03	.4576-03	.6129-03	.3530	4.491	546.9
64	3.0000	32500	36.000	.1200-01	.1000-01	.1340-01	.5922-03	.4921-03	.6591-03	.3910	4.574	547.1
64	3.0000	35000	37.000	.1280-01	.1060-01	.1430-01	.6295-03	.5233-03	.7009-03	.4150	4.811	547.3
64	3.0000	37500	38.000	.1420-01	.1180-01	.1580-01	.6993-03	.5812-03	.7784-03	.4610	5.401	547.1
64	3.0000	40000	39.000	.2240-01	.1860-01	.2490-01	.1101-02	.9143-03	.1225-02	.7240	8.519	548.6
64	3.0000	42500	40.000	.2620-01	.2170-01	.2910-01	.1286-02	.1068-02	.1433-02	.8440	9.963	551.0
64	3.0000	45000	41.000	.2590-01	.2150-01	.2890-01	.1275-02	.1059-02	.1420-02	.8380	9.544	549.7
64	3.0000	47500	42.000	.3180-01	.2640-01	.3540-01	.1561-02	.1296-02	.1740-02	1.023	11.35	552.0
64	3.0000	50000	43.000	.3850-01	.3190-01	.4290-01	.1892-02	.1570-02	.2108-02	1.235	13.70	553.6
64	3.0000	52500	44.000	.5340-01	.4430-01	.5950-01	.2625-02	.2177-02	.2926-02	1.709	19.93	555.7
64	3.0000	55000	45.000	.6870-01	.5690-01	.7670-01	.3379-02	.2799-02	.3771-02	2.184	24.13	557.5
64	3.0000	58000	46.000	.5860-01	.4850-01	.6530-01	.2879-02	.2397-02	.3211-02	1.970	20.19	557.5
64	3.0000	60000	47.000	.2540-01	.2110-01	.2830-01	.1248-02	.1036-02	.1389-02	.8200	8.681	549.3
64	3.0000	62000	48.000	.1440-01	.1190-01	.1600-01	.7057-03	.5866-03	.7895-03	.4650	5.133	546.6
64	3.0000	64000	49.000	.1090-01	.9100-02	.1220-01	.5371-03	.4465-03	.5977-03	.3550	3.953	546.1
64	3.0000	66000	50.000	.9300-02	.7700-02	.1030-01	.4557-03	.3789-03	.5071-03	.3010	3.224	545.7
64	3.0000	68000	51.000	.1230-01	.1020-01	.1360-01	.6024-03	.5025-03	.6706-03	.3970	4.901	548.1
64	3.0000	70000	52.000	.2380-01	.1980-01	.2660-01	.1172-02	.9732-03	.1306-02	.7680	9.470	551.7
64	3.0000	72000	53.000	.1330-01	.1110-01	.1480-01	.6547-03	.5435-03	.7232-03	.4300	5.963	550.6
64	3.0000	74000	54.000	.1390-01	.1150-01	.1550-01	.6832-03	.5674-03	.7609-03	.4490	5.863	550.1
64	3.0000	76000	55.000	.1400-01	.1170-01	.1560-01	.6900-03	.5733-03	.7683-03	.4540	4.592	548.3
64	3.0000	78000	56.000	.3580-01	.2960-01	.3990-01	.1757-02	.1457-02	.1962-02	1.140	12.93	558.8
64	4.0000	20500	72.000	.2750-01	.2260-01	.3060-01	.1350-02	.1120-02	.1505-02	.8810	10.27	554.5
64	4.0000	25000	73.000	.2050-01	.1700-01	.2290-01	.1009-02	.8354-03	.1123-02	.6600	7.701	552.5
64	4.0000	27500	74.000	.1610-01	.1340-01	.1790-01	.7935-03	.6564-03	.8804-03	.5190	6.400	550.6
64	4.0000	30000	56.000	.1380-01	.1150-01	.1540-01	.6805-03	.5652-03	.7578-03	.4470	5.840	549.4
64	4.0000	32500	57.000	.1550-01	.1370-01	.1930-01	.8095-03	.6724-03	.9015-03	.5320	6.955	549.5
64	4.0000	35000	58.000	.2940-01	.2350-01	.3170-01	.1397-02	.1159-02	.1556-02	.9130	11.91	553.3
64	4.0000	37500	59.000	.3980-01	.3310-01	.4440-01	.1959-02	.1625-02	.2183-02	1.278	16.56	554.6
64	4.0000	40000	60.000	.5730-01	.4750-01	.6490-01	.2816-02	.2333-02	.3141-02	1.824	23.72	559.0
64	4.0000	42500	61.000	.5100-01	.4600-01	.5950-01	.3925-02	.3295-02	.4451-02	2.551	33.05	566.8

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 129

(RVE0011)

04-74 (AEDC V41B-B8A) B62C12F10M16M127E52V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(IGT) BTU/ R FT2SEC	H(ITO) BTU/ R FT2SEC	H(1AM) BTU/ R FT2SEC	QDOT BTU FT2SEC	DTWDT DEG. R /SEC	TM DEG. R
64	4.0000	.45000	62.000	.8130-01	.6720-01	.9090-01	.3997-02	.3302-02	.4468-02	2.544	32.52	570.4
64	4.0000	.47500	53.000	.5890-01	.4680-01	.6580-01	.2897-02	.2397-02	.3234-02	1.864	23.49	563.6
64	4.0000	.50000	64.000	.3310-01	.2740-01	.3690-01	.1626-02	.1349-02	.1812-02	1.044	13.11	552.7
64	4.0000	.52500	65.000	.2260-01	.1880-01	.2520-01	.1113-02	.9246-03	.1240-02	.7370	9.028	549.8
64	4.0000	.55000	66.000	.1780-01	.1480-01	.1980-01	.8726-03	.7259-03	.9706-03	.5750	6.729	548.5
64	4.0000	.50000	67.000	.1110-01	.9300-02	.1240-01	.5474-03	.4552-03	.6092-03	.3620	4.071	545.6
64	4.0000	.65000	68.000	.8900-02	.7400-02	.9900-02	.4364-03	.3629-03	.4896-03	.2830	3.384	545.2
64	4.0000	.70000	69.000	.7000-02	.5800-02	.7800-02	.3426-03	.2849-03	.3813-03	.2270	2.522	545.6
64	4.0000	.75000	70.000	.6400-02	.5300-02	.7100-02	.3142-03	.2513-03	.3490-03	.2080	2.316	544.9
64	4.0000	.80000	75.000	.2400-02	.2000-02	.2700-02	.1177-03	.9791-04	.1310-03	.7800-01	.9390	544.7
64	4.0000	.85000	76.000	.1700-02	.1400-02	.1800-02	.8173-04	.6795-04	.9094-04	5400-01	.6410	545.1
64	4.0000	.87500	77.000	.5600-02	.4700-02	.6300-02	.2772-03	.2305-03	.3085-03	.1830	2.401	545.4
64	4.0000	.90000	78.000	.1350-01	.1120-01	.1500-01	.6631-03	.5508-03	.7383-03	.4360	5.637	549.0
64	4.0000	.92500	79.000	.1100-01	.9100-02	.1220-01	.5387-03	.4476-03	.5997-03	.3550	4.384	548.1
64	4.0000	.95000	80.000	.4800-02	.4000-02	.5300-02	.2348-03	.1952-03	.2613-03	.1550	1.817	546.3

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 13C

ORBITER FUSELAGE

OH-74 (AEDC V41B-88A) B62C12F10M16W127E52VBR19

(RVB0011)

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
65	8.000	24.84	864.1	134.2	-179.9	.0000	97.20	.9900-01	3.965	3656.	.7636-04	.7829-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R=
65	3.770	.4918-01	.2078-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAW BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
65	1.0000	.27500	1.0000	.1350-01	.1120-01	.1500-01	.6624-03	.5509-03	.7369-03	.4390	4.552	544.5
65	1.0000	.31000	2.0000	.1160-01	.9600-02	.1290-01	.5687-03	.4730-03	.6327-03	.3770	4.000	544.6
65	1.0000	.32500	3.0000	.9300-02	.7700-02	.1040-01	.4577-03	.3808-03	.5092-03	.3040	3.120	543.9
65	1.0000	.35000	4.0000	.1080-01	.9070-02	.1200-01	.5311-03	.4418-03	.5908-03	.3520	3.652	544.1
65	1.0000	.37500	5.0000	.1050-01	.8700-02	.1170-01	.5174-03	.4303-03	.5757-03	.3430	3.603	544.9
65	1.0000	.40000	6.0000	.1190-01	.9900-02	.1320-01	.5828-03	.4848-03	.6485-03	.3870	3.957	544.6
65	1.0000	.42500	7.0000	.1700-01	.1410-01	.1890-01	.8353-03	.6952-03	.9308-03	.5530	5.719	546.9
65	1.0000	.45000	8.0000	.1760-01	.1470-01	.1960-01	.8675-03	.7212-03	.9654-03	.5740	5.857	546.4
65	1.0000	.47500	9.0000	.1770-01	.1470-01	.1960-01	.8680-03	.7214-03	.9661-03	.5730	5.824	547.2
65	1.0000	.50000	10.000	.1860-01	.1590-01	.2070-01	.9167-03	.7619-03	.1020-02	.6053	6.123	547.2
65	1.0000	.52500	11.000	.2000-01	.1660-01	.2230-01	.9843-03	.8180-03	.1098-02	.6500	5.567	547.7
65	1.0000	.55000	12.000	.2370-01	.1970-01	.2640-01	.1164-02	.9673-03	.1296-02	.7680	7.586	548.6
65	1.0000	.60000	13.000	.3320-01	.2760-01	.3700-01	.1633-02	.1356-02	.1819-02	1.072	10.91	551.7
65	1.0000	.65000	14.000	.6590-01	.5540-01	.7460-01	.3268-02	.2724-02	.3666-02	2.135	21.46	559.5
55	1.0000	.70000	15.000	.4380-01	.4040-01	.5440-01	.2399-02	.1973-02	.2675-02	1.560	15.14	557.3
65	1.0000	.75000	16.000	.2230-01	.1850-01	.2480-01	.1097-02	.9112-03	.1222-02	.7220	7.284	550.2
65	1.0000	.80000	17.000	.1280-01	.1070-01	.1430-01	.6315-03	.5246-03	.7032-03	.4150	4.017	549.4
65	1.0000	.85000	18.000	.1370-01	.1140-01	.1520-01	.6716-03	.5587-03	.7471-03	.4460	5.227	544.0
65	2.0000	.28500	19.000	.1330-01	.1110-01	.1460-01	.6546-03	.5445-03	.7283-03	.4340	5.120	544.2
65	2.0000	.33700	20.000	.2050-01	.1720-01	.2500-01	.1015-02	.8437-03	.1129-02	.6720	7.939	546.0
65	2.0000	.39000	21.000	.2050-01	.1720-01	.2500-01	.1015-02	.8437-03	.1129-02	.6720	7.939	546.0
65	2.0000	.42600	22.000	.2340-01	.1950-01	.2610-01	.1151-02	.9567-03	.1281-02	.7600	8.992	547.9
65	2.0000	.47800	22.000	.2570-01	.2220-01	.2970-01	.1314-02	.1092-02	.1462-02	.8660	9.629	549.3

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 132

OH-74 (AEDC V418-B8A) B62C12F10H16M127E52VBR19

(RV800:1)

RUN NUMBER	TRAJ E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(10) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TW DEG. R
65	4.0000	.45000	62.000	.1740-01	.1440-01	.1940-01	.8549-03	.7104-03	.9516-03	.5640	7.292	547.9
65	4.0000	.47500	63.000	.1240-01	.1030-01	.1380-01	.6118-03	.5086-03	.6809-03	.4040	5.142	546.7
65	4.1300	.50000	64.000	.9000-02	.7500-02	.1000-01	.4438-03	.3691-03	.4939-03	.2940	3.635	545.5
65	4.3600	.52500	65.000	.7400-02	.6100-02	.8200-02	.3527-03	.3018-03	.4035-03	.2400	2.974	544.9
65	4.0000	.55000	66.000	.8400-02	.5300-02	.7100-02	.3151-03	.2621-03	.3508-03	.2090	2.451	544.4
65	4.0000	.60000	67.000	.4400-02	.3700-02	.4900-02	.2184-03	.1817-03	.2429-03	.1450	1.632	543.7
65	4.0000	.65000	68.000	.3100-02	.2600-02	.3400-02	.1525-03	.1269-03	.1696-03	.1010	1.188	543.4
65	4.0000	.70000	69.000	.2100-02	.1800-02	.2400-02	.1045-03	.8692-04	.1122-03	.6900-01	.7730	543.7
65	4.0000	.75000	70.000	.1700-02	.1400-02	.1900-02	.6933-04	.6933-04	.9267-04	.5500-01	.6180	542.6
65	4.0000	.80000	75.000	.1800-02	.1500-02	.2000-02	.8870-04	.7379-04	.9867-04	.5900-01	.7090	543.7
65	4.0000	.85000	76.000	.1600-02	.1300-02	.1700-02	.7689-04	.6395-04	.8534-04	.5100-01	.6040	544.4
65	4.0000	.87500	77.000	.3100-02	.2600-02	.3500-02	.1542-03	.1282-03	.1715-03	.1020	1.340	544.4
65	4.0000	.90000	78.000	.5300-02	.4400-02	.5900-02	.2598-03	.2151-03	.2878-03	.1710	2.218	545.3
65	4.0000	.92500	79.000	.6400-02	.5300-02	.7200-02	.3163-03	.2629-03	.3520-03	.2690	2.586	546.4
65	4.0000	.95000	80.000	.7900-02	.6600-02	.8800-02	.3884-03	.3228-03	.4322-03	.2570	3.007	546.5

DATE 07 DEC 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 133

OH-74 (AEDC V41B-BBA) 862C12F10M16W.27E52V8R13

(RV9001)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
65	8.000	29.92	864.2	1342.	-179.9	.0000	97.20	.8900-01	3.966	3866.	.7637-04	.7829-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R* .0175
66	3.771	.4918-01	.2078-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H(10) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTROT DEG. R /SEC	TH DEG. R
66	1.0000	.27500	1.0000	.1380-01	.1150-01	.1540-01	.6804-03	.5658-03	.7571-03	.4510	4.669	545.3	
66	1.0000	.30000	2.0000	.1260-01	.1050-01	.1410-01	.6218-03	.5171-03	.6919-03	.4120	4.363	545.1	
66	1.0000	.32500	3.0000	.1100-01	.9200-02	.1230-01	.5431-03	.4519-03	.6043-03	.3600	3.693	545.1	
66	1.0000	.35000	4.0000	.1130-01	.9400-02	.1260-01	.5573-03	.4634-03	.6200-03	.3690	3.825	544.9	
66	1.0000	.37500	5.0000	.1280-01	.1070-01	.1430-01	.6307-03	.5244-03	.7019-03	.4170	4.382	546.0	
66	1.0000	.40000	6.0000	.1900-01	.1580-01	.2110-01	.9345-03	.7767-03	.1040-02	.6170	6.328	547.1	
66	1.0000	.42500	7.0000	.1960-01	.1550-01	.2070-01	.9154-03	.7607-03	.1019-02	.6040	6.249	547.9	
66	1.0000	.45000	8.0000	.1890-01	.1570-01	.2110-01	.9315-03	.7741-03	.1037-02	.6150	6.270	547.9	
66	1.0000	.47500	9.0000	.1860-01	.1530-01	.1850-01	.8154-03	.6776-03	.9078-03	.5390	5.462	548.1	
66	1.0000	.50000	10.000	.2190-01	.1820-01	.2440-01	.1078-02	.8959-03	.1201-02	.7100	7.177	549.0	
66	1.0000	.52500	11.000	.2440-01	.2020-01	.2720-01	.1193-02	.9958-03	.1335-02	.7880	7.959	550.2	
66	1.0000	.55000	12.000	.3030-01	.2510-01	.3370-01	.1488-02	.1236-02	.1658-02	.9730	9.793	550.2	
66	1.0000	.57500	13.000	.4260-01	.3530-01	.4750-01	.2096-02	.1738-02	.2337-02	1.355	13.75	556.3	
66	1.0000	.60000	14.000	.3420-01	.2840-01	.3810-01	.1680-02	.1394-02	.1872-02	1.100	11.09	552.9	
66	1.0000	.62500	15.000	.2740-01	.2270-01	.3050-01	.1347-02	.1119-02	.1501-02	.8940	8.604	551.7	
66	1.0000	.65000	16.000	.1450-01	.1200-01	.1610-01	.7119-03	.5912-03	.7824-03	.7100	4.745	548.1	
66	1.0000	.67500	17.000	.5300-02	.4400-02	.5900-02	.2597-03	.2150-03	.2820-03	.710	1.651	547.8	
66	2.0000	.28500	18.000	.1430-01	.1190-01	.1590-01	.7019-03	.5837-03	.7610-03	.4650	5.447	545.5	
66	2.0000	.33700	19.000	.1230-01	.1020-01	.1370-01	.6010-03	.5031-03	.6731-03	.4010	4.724	545.0	
66	2.0000	.39000	20.000	.2440-01	.2030-01	.2720-01	.1200-02	.9976-03	.1335-02	.7930	9.326	547.6	
66	2.0000	.42600	21.000	.2490-01	.2070-01	.2770-01	.1225-02	.1017-02	.1364-02	.8050	9.426	548.7	
66	2.0000	.47800	22.000	.4110-01	.3410-01	.4560-01	.2022-02	.1678-02	.2253-02	1.324	14.69	552.9	

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

(RV90011)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF Q-TAM	H/GT01 BTU/ R FT2SEC	H/TO1 BTU/ R FT2SEC	H/TAH BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTAOT DEC. H /SEC	TH DEC. R
66	2.0000	.53000	23.000	.4250-01	.3520-01	.4730-01	.2089-02	.1732-02	.2328-02	1.361	15.06	556.3
66	2.0000	.56700	24.000	.2700-01	.2250-01	.3010-01	.1330-02	.1104-02	.1482-02	.8730	9.450	551.6
66	2.0000	.62000	25.000	.1790-01	.1490-01	.1900-01	.0890-03	.7312-03	.9801-03	.5800	6.282	549.3
66	2.0000	.67000	26.000	.1190-01	.0930-02	.1320-01	.5838-03	.4851-03	.6498-03	.3850	4.180	547.7
66	2.0000	.70500	27.000	.8200-02	.6900-02	.9200-02	.4057-03	.3373-03	.4515-03	.2680	2.885	546.3
66	2.0000	.75000	28.000	.6100-02	.5100-02	.6800-02	.3004-03	.2498-03	.3342-03	.1990	2.186	544.5
66	2.0000	.80000	29.000	.4000-02	.3300-02	.4400-02	.1949-03	.1620-03	.2168-03	.1290	1.423	545.3
66	2.0000	.82400	30.000	.1800-02	.1500-02	.2000-02	.8906-04	.7403-04	.9913-04	.9900-01	.8180	546.9
66	2.0000	.82400	30.000	.3190-01	.2640-01	.3550-01	.1567-02	.1300-02	.1746-02	1.023	10.82	553.6
66	3.0000	.22500	32.000	.2620-01	.2170-01	.2910-01	.1286-02	.1068-02	.1432-02	.6450	9.427	550.8
66	3.0000	.25000	33.000	.2080-01	.1730-01	.2310-01	.1021-02	.8487-03	.1137-02	.6740	7.531	547.8
66	3.0000	.27500	34.000	.1560-01	.1300-01	.1740-01	.7681-03	.6387-03	.8546-03	.5090	6.089	545.5
66	3.0000	.30000	35.000	.1410-01	.1170-01	.1570-01	.6930-03	.5764-03	.7710-03	.4600	5.687	544.6
66	3.0000	.32500	36.000	.1500-01	.1250-01	.1670-01	.7387-03	.6144-03	.8219-03	.4900	5.741	544.7
66	3.0000	.35000	37.000	.2520-01	.2100-01	.2810-01	.1241-02	.1032-02	.1381-02	.8200	9.507	546.8
66	3.0000	.37500	38.000	.3190-01	.2650-01	.3560-01	.1570-02	.1305-02	.1748-02	1.035	12.10	548.9
66	3.0000	.40000	39.000	.2850-01	.2370-01	.3180-01	.1403-02	.1165-02	.1562-02	.9240	10.86	549.3
66	3.0000	.42500	40.000	.3030-01	.2510-01	.3370-01	.1468-02	.1236-02	.1658-02	.9780	11.55	550.7
66	3.0000	.45000	41.000	.4250-01	.3530-01	.4740-01	.2091-02	.1735-02	.2330-02	1.368	15.55	553.8
66	3.0000	.47500	42.000	.2870-01	.2380-01	.3200-01	.1412-02	.1172-02	.1572-02	.9270	10.29	551.0
66	3.0000	.50000	43.000	.2420-01	.2010-01	.2690-01	.1189-02	.9877-03	.1325-02	.7820	8.690	550.5
66	3.0000	.52500	44.000	.1720-01	.1430-01	.1910-01	.8458-03	.7027-03	.9416-03	.5580	6.524	549.5
66	3.0000	.55000	45.000	.1310-01	.1090-01	.1460-01	.6456-03	.5365-03	.7186-03	.4260	4.741	547.4
66	3.0000	.60000	46.000	.7600-02	.6300-02	.8900-02	.3749-03	.3117-03	.4171-03	.2480	7.696	545.5
66	3.0000	.65000	47.000	.5300-02	.4400-02	.5900-02	.2630-03	.2187-03	.2926-03	.1740	1.849	544.8
66	3.0000	.70000	48.000	.4100-02	.3400-02	.4600-02	.2031-03	.1689-03	.2259-03	.1350	1.487	543.8
66	3.0000	.75000	49.000	.2700-02	.2200-02	.3000-02	.1321-03	.1099-03	.1470-03	.8800-01	.9940	543.3
66	3.0000	.80000	50.000	.3000-02	.2500-02	.3400-02	.1493-03	.1242-03	.1661-03	.9900-01	1.061	544.1
66	3.0000	.85000	51.000	.2500-02	.2100-02	.2800-02	.1254-03	.1012-03	.1396-03	.8300-01	1.025	546.8
66	3.0000	.90000	52.000	.2500-02	.2100-02	.2800-02	.1250-03	.1039-03	.1391-03	.8300-01	1.021	546.7
66	3.0000	.92500	53.000	.3200-02	.2700-02	.3600-02	.1597-03	.1327-03	.1779-03	.1050	1.457	547.2
66	3.0000	.95000	54.000	.4100-02	.3400-02	.4500-02	.1998-03	.1650-03	.2223-03	.1320	1.726	547.4
66	3.0000	.95000	55.000	.3600-02	.3000-02	.4100-02	.1792-03	.1490-03	.1994-03	.1190	1.199	546.3
66	4.0000	.20000	71.000	.3500-01	.2980-01	.4010-01	.1770-02	.1467-02	.1974-02	1.149	13.03	558.7
66	4.0000	.22500	72.000	.2760-01	.2290-01	.3070-01	.1355-02	.1125-02	.1611-02	.8890	10.36	553.2
66	4.0000	.25000	73.000	.2030-01	.1690-01	.2260-01	.9977-03	.8285-03	.1111-02	.6560	7.661	550.7
66	4.0000	.27500	74.000	.2050-01	.1700-01	.2280-01	.1009-02	.8322-03	.1123-02	.6540	8.201	549.3
66	4.0000	.30000	75.000	.1880-01	.1570-01	.2100-01	.9265-03	.7639-03	.1031-02	.6110	7.996	548.0
66	4.0000	.32500	76.000	.3950-01	.3290-01	.4410-01	.1795-02	.1490-02	.2001-02	1.115	15.33	553.3
66	4.0000	.35000	77.000	.3950-01	.3290-01	.4410-01	.1795-02	.1490-02	.2001-02	1.115	15.33	553.3
66	4.0000	.37500	78.000	.2400-01	.2000-01	.2680-01	.1182-02	.9819-03	.1316-02	.7780	10.17	549.6
66	4.0000	.40000	79.000	.2190-01	.1920-01	.2440-01	.1079-02	.8953-03	.1202-02	.7100	9.280	549.7
66	4.0000	.42500	80.000	.1420-01	.1180-01	.1580-01	.6990-03	.5803-03	.7782-03	.4610	6.031	545.1

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

(RVB001)

HEATING DATA ON ORBITER FUSELAGE PORT SIDE

04-74 (AEDC V418-B8A) 862C12F10M16W127E52V8R19

DATE 07 OCT 75

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H(9TO) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(11) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
66	4.0000	.45000	62.000	.8900-02	.7400-02	.1000-01	.4400-03	.3658-03	.4897-03	.2910	3.766	546.2
66	4.0000	.47500	63.000	.6900-02	.5700-02	.7600-02	.3373-03	.2805-03	.3754-03	.2230	2.840	545.8
66	4.1300	.50000	64.000	.5000-02	.4200-02	.5600-02	.2473-03	.2057-03	.2752-03	.1840	2.029	544.8
66	4.3000	.52500	65.000	.4500-02	.3800-02	.5000-02	.2221-03	.1847-03	.2471-03	.1470	1.821	545.1
66	4.0000	.55000	66.000	.4300-02	.3500-02	.4700-02	.2095-03	.1742-03	.2330-03	.1390	1.629	544.5
66	4.0000	.60000	67.000	.2400-02	.2000-02	.2700-02	.1193 03	.9921-04	.1327-03	.7900-01	.8910	543.8
66	4.0000	.65000	68.000	.1400-02	.1200-02	.1600-02	.7014-04	.5836-04	.7801-04	.4700-01	.5470	543.1
66	4.0000	.70000	69.000	.1500-02	.1200-02	.1600-02	.1037-03	.8591-04	.7974-04	.4800-01	.5300	542.6
66	4.0000	.75000	70.000	.1700-02	.1400-02	.2300-02	.8400-04	.6988-04	.1148-03	.6900-01	.7650	543.1
66	4.0000	.80000	75.000	.2100-02	.1700-02	.2300-02	.2638-04	.2195-04	.9345-04	.5600-01	.6720	543.9
66	4.0000	.85000	76.000	.5000-03	.4000-03	.6000-03	.1205-03	.1002-03	.2935-04	.1800-01	.2080	544.0
66	4.0000	.87500	77.000	.2400-02	.2000-02	.2700-02	.1205-03	.1002-03	.1340-03	.8000-01	1.047	544.3
66	4.0000	.90000	78.000	.2300-02	.1900-02	.2600-02	.1151-03	.9573-04	.1281-03	.7600-01	.9880	544.6
66	4.0000	.92500	79.000	.1700-02	.1400-02	.1900-02	.8359-04	.6952-04	.9300-04	.5500-01	.6860	544.8
65	4.0000	.95000	80.000	.1700-02	.1400-02	.1900-02	.8258-04	.6868-04	.9188-04	.5500-01	.6420	545.0

(RV8001)

OH-7A (AEDC V418-B8A) B*2C12F10M16H127E5VBR19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	Y DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
67	8.000	34.88	864.8	134.3	-179.9	.0000	97.30	.8900-01	3.969	3867.	.7637-04	.7835-07

RUN NUMBER	RV/L X10 6	HREF BTU/ R	SIN NO R=
67	3.769	.4920-01	.2078-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAW1 BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
67	1.0000	.27500	1.0000	.1490-01	.1240-01	.1680-01	.7348-03	.6111-03	.8175-03	.4870	5.048	545.2
67	1.0000	.30000	2.0000	.1360-01	.1130-01	.1510-01	.6673-03	.5549-03	.7424-03	.4430	4.694	545.2
67	1.0000	.32500	3.0000	.1120-01	.0900-02	.1250-01	.5508-03	.4581-03	.8128-03	.3680	3.751	545.0
67	1.0000	.35000	4.0000	.1270-01	.1050-01	.1410-01	.6237-03	.5188-03	.6939-03	.4140	4.290	544.7
67	1.0000	.37500	5.0000	.1710-01	.1420-01	.1910-01	.8429-03	.7007-03	.9381-03	.5380	5.852	547.0
67	1.0000	.40000	6.0000	.1990-01	.1650-01	.2210-01	.9786-03	.8135-03	.1089-02	.6470	6.637	547.1
67	1.0000	.42500	7.0000	.1390-01	.1150-01	.1540-01	.6826-03	.5674-03	.7586-03	.4520	4.575	546.7
67	1.0000	.45000	8.0000	.1940-01	.1610-01	.2160-01	.9535-03	.7929-03	.1062-02	.6310	6.436	547.4
67	1.0000	.47500	9.0000	.2190-01	.1820-01	.2430-01	.1075-02	.8934-03	.1197-02	.7090	7.159	548.9
67	1.0000	.50000	10.000	.1920-01	.1600-01	.2140-01	.9468-03	.7868-03	.1054-02	.6250	6.319	548.2
67	1.0000	.52500	11.000	.2660-01	.2210-01	.2960-01	.1307-02	.1086-02	.1455-02	.8620	8.709	549.1
67	1.0000	.55000	12.000	.3560-01	.2960-01	.3970-01	.1752-02	.1456-02	.1951-02	1.154	11.94	550.2
67	1.0000	.58000	13.000	.2750-01	.2290-01	.3070-01	.1354-02	.1125-02	.1508-02	.8910	8.986	551.2
67	1.0000	.65000	14.000	.3490-01	.2900-01	.3890-01	.1717-02	.1425-02	.1912-02	1.128	11.37	552.0
67	1.0000	.70000	15.000	.1030-01	.0600-02	.1150-01	.5078-03	.4220-03	.5652-03	.3360	3.274	547.7
67	1.0000	.75000	16.000	.3700-02	.3100-02	.4100-02	.1817-03	.1511-03	.2022-03	.1200	1.218	546.1
67	1.0000	.80000	17.000	.1300-02	.1100-02	.1500-02	.6614-04	.5493-04	.7359-04	.4400-01	.4240	545.9
67	2.0000	.28500	18.000	.1600-01	.1330-01	.1780-01	.7869-03	.6544-03	.8775-03	.5220	6.119	545.1
67	2.0000	.33700	19.000	.1500-01	.1250-01	.1670-01	.7399-03	.6154-03	.8233-03	.4910	5.783	545.2
67	2.0000	.39000	20.000	.2340-01	.1950-01	.2610-01	.1154-02	.9591-03	.1284-02	.7640	8.989	546.8
67	2.0000	.42600	21.000	.2230-01	.1860-01	.2490-01	.1099-02	.9136-03	.1223-02	.7270	8.595	547.6
67	2.0000	.47800	22.000	.2470-01	.2050-01	.2750-01	.1214-02	.1009-02	.1351-02	.8020	8.309	548.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 137

(RV0001)

OH-74 (AEDC V41B-B8A) B62C12F10H16W127E52V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
67	2.0000	.53000	23.000	.3160-01	.2620-01	.3510-01	.1553-02	.1289-02	.1729-02	1.020	11.32	551.9
67	2.0000	.56700	24.000	.2030-01	.1690-01	.2270-01	.1001-02	.8318-03	.1115-02	.6600	7.155	549.4
67	2.0000	.62000	25.000	.1340-01	.1120-01	.1490-01	.6604-03	.5489-03	.7349-03	.4370	4.742	546.9
67	2.0000	.67000	26.000	.7900-02	.6600-02	.8800-02	.3911-03	.3253-03	.4351-03	.2600	2.820	545.0
67	2.0000	.70500	27.000	.5100-02	.4300-02	.5700-02	.2052-03	.2092-03	.2798-03	.1672	1.797	544.5
67	2.0000	.75000	28.000	.2300-02	.1900-02	.2600-02	.1145-03	.9528-04	.1274-03	.7600-01	8.360	543.4
67	2.0000	.80000	29.000	.2000-02	.1600-02	.2200-02	.9598-04	.7994-04	.1068-03	5400-01	.7030	544.1
67	2.0000	.82400	30.000	.6000-03	.5000-03	.7000-03	.3125-04	.2599-04	.3477-04	2100-01	.2880	545.3
67	3.0000	.82400	31.000	.3230-01	.2680-01	.3600-01	.1590-02	.1319-02	.1771-02	1.042	11.00	553.3
67	3.0000	.82500	32.000	.2790-01	.2310-01	.3100-01	.1371-02	.1139-02	.1527-02	.9030	10.07	550.4
67	3.0000	.85000	33.000	.2080-01	.1730-01	.2320-01	.1024-02	.8508-03	.1139-02	.6770	7.565	547.3
67	3.0000	.87500	34.000	.1620-01	.1350-01	.1810-01	.7995-03	.6649-03	.8395-03	5310	6.351	545.1
67	3.0000	.90000	35.000	.1970-01	.1640-01	.2200-01	.6607-03	.5497-03	.7350-03	4390	5.439	543.8
67	3.0000	.92500	36.000	.1340-01	.1120-01	.1490-01	.9708-03	.8073-03	.1080-02	.6440	7.546	545.4
67	3.0000	.95000	37.000	.2750-01	.2290-01	.3060-01	.1353-02	.1124-02	.1505-02	.8950	10.38	546.6
67	3.0000	.97500	38.000	.1990-01	.1650-01	.2860-01	.1266-02	.1052-02	.1409-02	.8380	9.809	546.8
67	3.0000	.40000	39.000	.3790-01	.3150-01	.4220-01	.1865-02	.1549-02	.2078-02	1.226	14.47	551.9
67	3.0000	.42500	40.000	.2870-01	.2380-01	.3190-01	.1345-02	.1118-02	.1497-02	.8890	10.13	548.1
67	3.0000	.45000	41.000	.2350-01	.1950-01	.2610-01	.1154-02	.9589-03	.1284-02	.7620	8.472	548.2
67	3.0000	.47500	42.000	.1300-01	.1090-01	.1450-01	.6423-03	.441-03	.5634-03	3360	4.988	545.7
67	3.0000	.50000	43.000	.1030-01	.8600-02	.1140-01	.5053-03	.4211-03	.3198-03	.1910	2.078	543.6
67	3.0000	.52500	44.000	.5800-02	.4900-02	.6500-02	.2875-03	.2392-03	.3198-03	.1330	1.407	543.1
67	3.0000	.55000	45.000	.4000-02	.3400-02	.4500-02	.1992-03	.1657-03	.2215-03	.8400-01	.9300	542.6
67	3.0000	.57500	46.000	.2600-02	.2100-02	.2900-02	.1263-03	.1053-03	.1407-03	.5900-01	.7470	542.5
67	3.0000	.60000	47.000	.2100-02	.1700-02	.2300-02	.1031-03	.8577-04	.1146-03	.6500-01	.1010	542.7
67	3.0000	.62500	48.000	.2000-02	.1600-02	.2200-02	.9825-04	.8176-04	.1093-03	.6400-01	.7960	545.7
67	3.0000	.65000	49.000	.2000-02	.1600-02	.2200-02	.9706-04	.8071-04	.1080-03	.5000-01	.6140	546.1
67	3.0000	.67500	50.000	.1500-02	.1300-02	.1700-02	.7494-04	.6231-04	.8339-04	.4600-01	.631	546.1
67	3.0000	.70000	51.000	.1400-02	.1200-02	.1600-02	.6917-04	.5751-04	.7697-04	.5500-01	.7250	546.1
67	3.0000	.72500	52.000	.1700-02	.1400-02	.1900-02	.8355-04	.6948-04	.9299-04	.1130	1.146	545.6
67	3.0000	.75000	53.000	.3500-02	.2900-02	.3900-02	.1708-03	.1421-03	.1901-03	1.126	12.77	557.8
67	3.0000	.77500	54.000	.3510-01	.2910-01	.3920-01	.1729-02	.1434-02	.1928-02	.8350	9.755	552.4
67	3.0000	.80000	55.000	.2590-01	.2150-01	.2880-01	.1045-02	.8681-03	.1163-02	.6890	8.053	549.6
67	3.0000	.82500	56.000	.2120-01	.1760-01	.2360-01	.1566-02	.1300-02	.1818-02	.7630	9.657	550.0
67	3.0000	.85000	57.000	.2410-01	.2010-01	.2590-01	.1186-02	.9870-03	.1323-02	.7500	9.807	548.4
67	3.0000	.87500	58.000	.2310-01	.1920-01	.2570-01	.1136-02	.9419-03	.1254-02	1.029	13.44	551.4
67	3.0000	.90000	59.000	.3180-01	.2540-01	.3550-01	.1566-02	.1300-02	.1744-02	.7710	10.38	548.9
67	3.0000	.92500	60.000	.2380-01	.1970-01	.2650-01	.1169-02	.9715-03	.1302-02	.8520	11.14	549.0
67	3.0000	.95000	61.000	.2620-01	.2180-01	.2920-01	.1291-02	.1073-02	.1438-02	.6750	8.617	547.6
67	3.0000	.97500	62.000	.2070-01	.1720-01	.2310-01	.1021-02	.8483-03	.1130-02	.4687	4.687	545.5
67	3.0000	.42500	61.000	.1100-01	.9100-02	.1220-01	.5296-03	.4487-03	.6004-03	.3560		

04-74 (AEDC V41B-88A) B62C12F10M16W127E52V8R19

(R-800)

ORBITER FUSELAGE

PAHAMETRIC DATA

BETA	=	.0000	MACH	=	8.0000	ELEVON	=	.0000	RUDDER	=	.0000
------	---	-------	------	---	--------	--------	---	-------	--------	---	-------

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG, R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
68	8.000	39.96	865.0	1343.	-179.9	.0000	97.30	.8930-01	3.969	3867.	.7639-04	.7835-07
RUN NUMBER	RN/L X10 6 /FT	WREF BTU/ R FT ² SEC	STN NO R=									
68	3.770	.0175	.2078-01									

Y.A.O.O.

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H1ST0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAW BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TH DEG. R
68	1.0000	.27500	1.0000	.1510-01	.1250-0	.1683-01	.7413-03	.6102-03	.8249-03	.4910	5.078	546.7
68	1.0000	.30000	2.0000	.1220-01	.1010-0	.1350-01	.5986-03	.976-03	.6661-03	.3960	4.200	546.4
68	1.0000	.32500	3.0000	.1090-01	.9100-02	.1220-01	.5379-03	.4473-03	.5986-03	.3560	3.654	546.3
68	1.0000	.35000	4.0000	.1800-01	.1490-01	.2000-01	.8837-03	.7346-03	.9835-03	.5950	6.048	547.1
68	1.0000	.37500	5.0000	.1710-01	.1420-01	.1900-01	.8413-03	.6991-03	.9385-03	.5560	5.828	548.1
68	1.0000	.40000	6.0000	.1050-01	.1370-01	.182-01	.8117-03	.6747-03	.9035-03	.5370	5.499	547.7
68	1.0000	.42500	7.0000	.1820-01	.1510-01	.2020-01	.8932-03	.7422-03	.9944-03	.5900	6.096	548.6
68	1.0000	.45000	8.0000	.2540-01	.2110-01	.2830-01	.1250-02	.1039-02	.1392-02	.8250	8.410	548.9
68	1.0000	.47500	9.0000	.2130-01	.1770-01	.2370-01	.1047-02	.8695-03	.1166-02	.6893	6.989	550.4
68	1.0000	.50000	10.000	.2240-01	.1860-01	.2500-01	.1104-02	.9172-03	.1229-02	.7280	7.351	549.4
68	1.0000	.52500	11.000	.4450-01	.3690-01	.9600-01	.2190-02	.1818-02	.2439-02	.1437	14.49	552.5
68	1.0000	.55000	12.000	.2880-01	.2400-01	.3210-01	.1419-02	.1179-02	.1580-02	.9340	9.344	550.4
68	1.0000	.57500	13.000	.3290-01	.2730-01	.3560-01	.1617-02	.1342-02	.1802-02	.1050	10.68	553.3
68	1.0000	.60000	14.000	.1250-01	.1050-01	.1403-01	.6201-03	.5152-03	.6903-03	.4090	4.135	548.7
68	1.0000	.70000	15.000	.3300-02	.2700-02	.3600-02	.1602-03	.1332-03	.1782-03	.1050	1.036	546.1
68	1.0000	.75000	16.000	.2200-02	.1800-02	.2400-02	.1073-03	.8920-04	.1193-03	.7100-01	.7200	545.3
68	1.0000	.80000	17.000	.2400-02	.2000-02	.2700-02	.1202-03	.9994-04	.1338-02	.8000-01	.7810	546.1
68	2.0000	.29500	18.000	.1440-01	.1200-01	.1600-01	.7074-03	.5881-03	.7873-03	.4680	5.484	547.5
68	2.0000	.33700	19.000	.2120-01	.1760-01	.2360-01	.1042-02	.8662-03	.1160-02	.6890	8.107	547.5
68	2.0000	.39000	20.000	.1930-01	.1610-01	.2150-01	.9506-03	.7900-03	.1058-02	.6280	7.383	548.4
68	2.0000	.42600	21.000	.3333-01	.2760-01	.3710-01	.1638-02	.1360-02	.1824-02	.1076	12.58	551.5
68	2.0000	.47800	22.000	.2970-01	.2460-01	.3300-01	.1459-02	.1212-02	.1625-02	.9610	10.67	550.3

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 140

(RV80011)

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-88A) B62C12F10M16M127652V6R19

DATE 07 OCT 75

RUN NUMBER	TRAC	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R-TAN	H19T0 BTU/R FT2SEC	H10T0 BTU/R FT2SEC	H1TAN BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TN DEG. R
68	2.0000	.53000	23.000	.2380-01	.1970-01	.2650-01	.1169-02	.9707-03	.1302-02	.7690	8.530	551.2
68	2.0000	.56700	24.000	.1680-01	.1390-01	.1870-01	.0258-03	.6861-03	.9195-03	.5450	5.903	549.2
68	2.0000	.62000	25.000	.7700-02	.6400-02	.6600-02	.3808-03	.3166-03	.4237-03	.2520	2.736	546.0
68	2.0000	.67000	26.000	.3900-02	.3200-02	.4300-02	.1919-03	.1596-03	.2136-03	.1270	1.393	545.4
68	2.0000	.70500	27.000	.2200-02	.1900-02	.2400-02	.1063-03	.8846-04	.1183-03	.7100-01	.7600	544.3
68	2.0000	.75000	28.000	.3100-02	.2600-02	.3500-02	.1548-03	.1268-03	.1722-03	.1030	.1131	543.4
68	2.0000	.82400	29.000	.1200-02	.1000-02	.1300-02	.5709-04	.4748-04	.6352-04	.3800-01	.1055	544.0
68	3.0000	.20000	31.000	.3260-01	.2710-01	.3840-01	.1695-02	.1332-02	.1789-02	.1050	.1108	544.9
68	3.0000	.22500	32.000	.2660-01	.2210-01	.2970-01	.1311-02	.1089-02	.1461-02	.8610	9.605	551.8
68	3.0000	.25000	33.000	.2090-01	.1740-01	.2330-01	.1029-02	.8548-03	.1145-02	.6790	7.577	549.2
68	3.0000	.27500	34.000	.1510-01	.1260-01	.1680-01	.7436-03	.6182-03	.8276-03	.4920	5.890	546.5
68	3.0000	.30000	35.000	.1630-01	.1350-01	.1810-01	.8003-03	.6654-03	.8755-03	.5300	6.556	546.1
68	3.0000	.32500	36.000	.2800-01	.2320-01	.3110-01	.1114-02	.1144-02	.1532-02	.9090	10.64	543.2
68	3.0000	.35000	37.000	.2710-01	.2250-01	.3010-01	.1333-02	.1107-02	.483-02	.8800	10.19	548.4
68	3.0000	.37500	38.000	.2050-01	.1710-01	.2290-01	.1011-02	.8400-03	.1125-02	.6680	7.811	548.2
68	3.0000	.40000	39.000	.2920-01	.2430-01	.3250-01	.1437-02	.1194-02	.1600-02	.9480	11.15	549.0
68	3.0000	.42500	40.000	.3090-01	.2570-01	.3450-01	.1523-02	.1264-02	.1896-02	1.001	11.82	551.4
68	3.0000	.45000	41.000	.2820-01	.2340-01	.3130-01	.1385-02	.1151-02	.1532-02	.9130	10.40	549.5
68	3.0000	.47500	42.000	.2660-01	.2210-01	.2960-01	.1309-02	.1087-02	.1457-02	.8620	9.570	550.1
68	3.0000	.50000	43.000	.1500-01	.1240-01	.1670-01	.7361-03	.6118-03	.8194-03	.4860	5.408	547.9
68	3.0000	.52500	44.000	.8900-02	.7400-02	.9900-02	.4298-03	.3649-03	.4883-03	.2910	3.407	546.0
68	3.0000	.55000	45.000	.7200-02	.6000-02	.8000-02	.3528-03	.2934-03	.3925-03	.2340	2.606	545.2
68	3.0000	.60000	46.000	.4500-02	.3900-02	.5000-02	.2233-03	.1858-03	.2484-03	.1480	1.612	544.3
68	3.0000	.65000	47.000	.2800-02	.2400-02	.3200-02	.1400-03	.1165-03	.1558-03	.9300-01	.9890	543.1
68	3.0000	.70000	48.000	.2100-02	.1700-02	.2300-02	.1017-03	.8464-04	.1131-03	.6800-01	.7470	542.9
68	3.0000	.75000	49.000	.3100-02	.2500-02	.3400-02	.1538-03	.1280-03	.1711-03	.1020	1.114	542.5
68	3.0000	.80000	50.000	.1800-02	.1500-02	.2000-02	.1507-03	.1254-03	.1676-03	.1000+00	1.074	543.3
68	3.0000	.87500	52.000	.1600-02	.1300-02	.1800-02	.7946-04	.6607-04	.9906-04	.5900-01	.7350	546.0
68	3.0000	.90000	53.000	.2600-02	.2100-02	.2900-02	.1268-03	.1054-03	.1411-03	.5300-01	.5510	546.1
68	3.0000	.95000	54.000	.4800-02	.4000-02	.5300-02	.2339-03	.1944-03	.2603-03	.1550	2.026	546.9
68	3.0000	.95000	55.000	.5800-02	.4900-02	.6500-02	.2874-03	.2389-03	.3199-03	.1900	1.923	546.5
68	4.0000	.20000	71.000	.3340-01	.2710-01	.3730-01	.1644-02	.1363-02	.1834-02	1.063	12.13	558.4
68	4.0000	.22500	72.000	.2740-01	.2280-01	.3060-01	.1351-02	.1121-02	.1595-02	.8840	10.32	554.0
68	4.0000	.25000	73.000	.2470-01	.2050-01	.2750-01	.1214-02	.1008-02	.1353-02	.7970	9.313	552.0
68	4.0000	.27500	74.000	.2740-01	.2280-01	.3050-01	.1349-02	.1120-02	.1503-02	.8850	10.91	552.4
68	4.0000	.30000	76.000	.2950-01	.2450-01	.3290-01	.1453-02	.1207-02	.1619-02	.9550	12.47	551.6
68	4.0000	.32500	77.000	.2650-01	.2200-01	.2960-01	.1306-02	.1085-02	.1455-02	.8590	11.22	551.2
68	4.0000	.35000	78.000	.2530-01	.2100-01	.2810-01	.1243-02	.1032-02	.1384-02	.8170	10.67	550.9
68	4.0000	.37500	79.000	.2930-01	.2440-01	.3270-01	.1444-02	.1199-02	.1608-02	.9490	12.39	551.2
68	4.0000	.40000	80.000	.1580-01	.1310-01	.1760-01	.7768-03	.6456-03	.8647-03	.5130	6.714	547.9
68	4.0000	.42500	81.000	.9200-02	.7600-02	.1020-01	.4516-03	.3755-03	.5025-03	.2990	3.919	545.9

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 141

OH-74 (AEDC V41B-BBA) B62C12F10H16M127E52VBR19

(RVB0011)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	D1MDT DEG. R /SEC	TW DEG. R
68	4.0000	.45000	62.000	.6800-02	.5700-02	.7600-02	.3351-03	.2787-03	.3728-03	.2220	2.879	545.0
68	4.0000	.47500	63.000	.4900-02	.4000-02	.5400-02	.2392-03	.1990-03	.2661-03	.1590	2.023	544.3
68	4.0000	.50000	64.000	.3400-02	.2800-02	.3800-02	.1660-03	.1381-03	.1846-03	.1100	1.366	543.7
68	4.0000	.52500	65.000	.2500-02	.2100-02	.2800-02	.1218-03	.1013-03	.1355-03	.8100-01	1.002	544.0
68	4.0000	.55000	66.000	.2000-02	.1700-02	.2300-02	.1004-03	.8351-04	.1116-03	.6700-01	.7830	543.3
68	4.0000	.60000	67.000	.1200-02	.1000-02	.1400-02	.5979-04	.4976-04	.6849-04	.4000-01	.4490	542.5
68	4.0000	.65000	68.000	.1600-02	.1400-02	.1800-02	.8113-04	.6752-04	.9023-04	.5400-01	.6340	542.8
68	4.0000	.70000	69.000	.1000-02	.9000-03	.1100-02	.5062-04	.4211-04	.5630-04	.3400-01	.3750	543.9
68	4.0000	.75000	70.000	.2700-02	.2200-02	.3000-02	.1327-03	.1104-03	.1476-03	.8800-01	.9840	543.5
68	4.0000	.80000	75.000	.1500-02	.1200-02	.1700-02	.7375-04	.6135-04	.8204-04	.4900-01	.5900	544.3
68	4.0000	.87500	77.000	.1300-02	.1100-02	.1400-02	.6390-04	.5315-04	.7109-04	.4200-01	.5560	544.5
68	4.0000	.90000	78.000	.2500-02	.2100-02	.2800-02	.1245-03	.1036-03	.1386-03	.8300-01	1.070	545.2
68	4.0000	.92500	79.000	.4600-02	.3800-02	.5100-02	.2257-03	.1876-03	.2511-03	.1490	1.848	546.3
68	4.0000	.95000	80.000	.3900-02	.3200-02	.4300-02	.1911-03	.1589-03	.2126-03	.1270	1.485	545.5

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 142

(RV80011)

OH-74 (AEDC V41B-88A) B62C12F10M16W127E52V6R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = .0000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
69	8.000	44.03	864.1	1345.	-179.9	.0000	97.50	.8900-01	3.965	3870.	.7619-04	.7847-07

RUN NUMBER	RM/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175
69	3.758	4920-01	.2081-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAW	H19TO BTU/ R FT ² SEC	H1TO1 BTU/ R FT ² SEC	H1TAM BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTWDT DEG. R /SEC	TM DEG. R
69	1.0000	.27500	1.0000	.1430-01	.1190-01	.1590 01	.7031-03	.5847-03	.7824-03	.4670	4.829	546.8
69	1.0000	.30000	2.0000	.1350-01	.1120-01	.1500-01	.6644-03	.5524-03	.7393-03	.4410	4.671	546.9
69	1.0000	.32500	3.0000	.1430-01	.1190-01	.1590-01	.7026-03	.5842-03	.7819-03	.4660	4.780	546.9
69	1.0000	.35000	4.0000	.1980-01	.1650-01	.2210-01	.9754-03	.8108-03	.1086-02	.6460	6.684	547.9
69	1.0000	.37500	5.0000	.1670-01	.1390-01	.1860-01	.8220-03	.6632-03	.9150-03	.5440	5.703	548.7
69	1.0000	.40000	6.0000	.1770-01	.1480-01	.1980-01	.8730-03	.7257-03	.9717-03	.5780	5.925	548.1
69	1.0000	.42500	7.0000	.2120-01	.1760-01	.2360-01	.1041-02	.8649-03	.1199-02	.6880	7.108	549.6
69	1.0000	.45000	8.0000	.2410-01	.2000-01	.2680-01	.1184-02	.9840-03	.1319-02	.7820	7.971	549.9
69	1.0000	.47500	9.0000	.1690-01	.1570-01	.2100-01	.9299-03	.7727-03	.1035-02	.6150	6.235	549.5
69	1.0000	.50000	10.000	.3780-01	.3140-01	.4210-01	.1859-02	.1545-02	.2071-02	1.226	12.28	550.9
69	1.0000	.52500	11.000	.3570-01	.2960-01	.3980-01	.1757-02	.1459-02	.1956-02	1.157	11.66	552.1
69	1.0000	.55000	12.000	.3670-01	.3050-01	.4090-01	.1807-02	.1501-02	.2012-02	1.191	11.90	551.6
69	1.0000	.60000	13.000	.2930-01	.2430-01	.3260-01	.1441-02	.1196-02	.1605-02	.9470	9.547	553.1
69	1.0000	.65000	14.000	.6600-02	.5500-02	.7403-02	.3261-03	.2711-03	.3629-03	.2160	2.185	547.4
69	1.0000	.70000	15.000	.1400-02	.1200-02	.1500-02	.6803-04	.5658-04	.7568-04	.4500-01	.4420	545.3
69	1.0000	.75000	16.000	.3900-02	.3200-02	.4300-02	.1898-03	.1579-03	.2111-03	.1260	1.278	545.0
69	1.0300	.80000	17.000	.4400-02	.3700-02	.4900-02	.2179-03	.1812-03	.2424-03	.1450	1.401	546.0
69	2.0000	.85000	18.000	.1590-01	.1320-01	.1770-01	.7810-03	.6493-03	.8691-03	.5180	6.065	547.2
69	2.0000	.33700	19.000	.2550-01	.2120-01	.2840-01	.1254-02	.1042-02	.1396-02	.8290	9.740	549.6
69	2.0000	.39000	20.000	.2200-01	.1830-01	.2450-01	.1082-02	.8992-03	.1204-02	.7160	8.423	548.5
69	2.0000	.42600	21.000	.3420-01	.2840-01	.3810-01	.1681-02	.1395-02	.1872-02	1.105	12.90	552.9
69	2.0000	.47800	22.000	.4360-01	.3620-01	.4860-01	.2146-02	.1781-02	.2390-02	1.410	15.64	553.2

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 143

(RV8001)

OH-74 (AEDC V41B-B8A) 862C12F10M16M127E52V8R19

RUN NUMBER	TRAJ E	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=T.W	H19T0 BTU/ R FT2SEC	H10T1 BTU/ R FT2SEC	H11A1 BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TW DEG. R
69	2.0000	.53000	23.000	.2310-01	.1920-01	.2570-01	.1136-02	.9439-03	.1266-02	.7490	8.317	551.1
69	2.0000	.56700	24.000	.1330-01	.1110-01	.1480-01	.6556-03	.5449-03	.7297-03	.4340	4.707	548.4
69	2.0000	.62000	25.000	.5900-02	.4900-02	.6600-02	.2911-03	.2421-03	.3239-03	.1930	2.099	546.2
69	2.0000	.67000	26.000	.3000-02	.2500-02	.3300-02	.1456-03	.1212-03	.1620-03	.9700-01	1.056	543.7
69	2.0000	.70500	27.000	.2400-02	.2000-02	.2700-02	.1194-03	.9940-04	.1328-03	.8000-01	.8580	543.3
69	2.0000	.75000	28.000	.4100-02	.3400-02	.4500-02	.2004-03	.1668-03	.2229-03	.1340	1.468	543.3
69	2.0000	.80000	29.000	.3900-02	.3300-02	.4400-02	.1941-03	.1615-03	.2159-03	.1290	1.427	544.1
69	2.0000	.82400	30.000	.1200-02	.1000-02	.1300-02	.5797-04	.4823-04	.6448-04	.3900-01	.5370	544.8
69	3.0000	.20000	31.000	.3190-01	.2640-01	.3550-01	.1567-02	.1300-02	.1746-02	1.028	10.85	554.7
69	3.0000	.22500	32.000	.2580-01	.2140-01	.2870-01	.1267-02	.1052-02	.1411-02	.8340	9.304	551.9
69	3.0000	.25000	33.000	.2120-01	.1760-01	.2360-01	.1043-02	.8662-03	.1161-02	.6890	7.692	549.6
69	3.0000	.27500	34.000	.1710-01	.1420-01	.1900-01	.8418-03	.8998-03	.8388-03	.5580	6.674	547.5
69	3.0000	.30000	35.000	.2040-01	.1700-01	.2270-01	.1004-02	.8351-03	.1118-02	.6070	8.240	546.7
69	3.0000	.32500	36.000	.2790-01	.2320-01	.3110-01	.1375-02	.1143-02	.1530-02	.9100	10.64	548.7
69	3.0000	.35000	37.000	.2350-01	.1950-01	.2610-01	.1154-02	.9596-03	.1286-02	.7650	8.855	548.1
69	3.0000	.37500	38.000	.2410-01	.2000-01	.2680-01	.1186-02	.9855-03	.1320-02	.7850	9.184	548.4
69	3.0000	.40000	39.000	.3110-01	.2580-01	.3460-01	.1530-02	.1271-02	.1703-02	1.011	11.88	549.5
69	3.0000	.42500	40.000	.2700-01	.2250-01	.3010-01	.1330-02	.1105-02	.1481-02	.8780	10.36	550.8
69	3.0000	.45000	41.000	.3040-01	.2530-01	.3390-01	.1497-02	.1243-02	.1666-02	.9880	11.25	550.2
69	3.0000	.47500	42.000	.2160-01	.1790-01	.2410-01	.1063-02	.8830-03	.1183-02	.7020	7.794	550.2
69	3.0000	.50000	43.000	.1160-01	.9700-02	.1290-01	.5710-03	.4748-03	.6354-03	.3790	4.213	547.1
69	3.0000	.52500	44.000	.7100-02	.5900-02	.7900-02	.3498-03	.2909-03	.3891-03	.2330	2.725	545.6
69	3.0000	.55000	45.000	.6300-02	.5300-02	.7000-02	.3108-03	.2585-03	.3457-03	.2070	2.302	545.0
69	3.0000	.60000	46.000	.4200-02	.3500-02	.4600-02	.2044-03	.1701-03	.2273-03	.1360	1.480	544.1
69	3.0000	.65000	47.000	.2600-02	.2200-02	.2900-02	.1275-03	.1061-03	.1418-03	.8500-01	.9030	543.0
69	3.0000	.70000	48.000	.1900-02	.1600-02	.2100-02	.9504-04	.7911-04	.1057-03	.6300-01	.7010	542.5
69	3.0000	.75000	49.000	.3500-02	.2900-02	.3900-02	.1715-03	.1428-03	.1908-03	.1150	1.246	542.7
69	3.0000	.80000	50.000	.2800-02	.2300-02	.3100-02	.1372-03	.1142-03	.1526-03	.9100-01	.9800	543.5
69	3.0000	.85000	51.000	.1200-02	.1000-02	.1400-02	.6126-04	.5096-04	.6814-04	.4100-01	.5050	544.7
69	3.0000	.87500	52.000	.1500-02	.1300-02	.1700-02	.7548-04	.6277-04	.8398-04	.5000-01	.6200	546.0
69	3.0000	.90000	53.000	.2600-02	.2200-02	.2900-02	.1292-03	.1074-03	.1437-03	.8600-01	1.193	546.5
69	3.0000	.92500	54.000	.4400-02	.3500-02	.4900-02	.2154-03	.1791-03	.2397-03	.1430	1.869	547.2
69	3.0000	.95000	55.000	.4100-02	.3400-02	.4600-02	.2025-03	.1684-03	.2253-03	.1340	1.359	546.7
69	4.0000	.20000	71.000	.3190-01	.2650-01	.3560-01	.1570-02	.1302-02	.1751-02	1.024	11.62	558.4
69	4.0000	.22500	72.000	.2800-01	.2330-01	.3120-01	.1379-02	.1145-02	.1537-02	.9050	10.56	554.4
69	4.0000	.25000	73.000	.2770-01	.2300-01	.3080-01	.1360-02	.1129-02	.1515-02	.8950	10.44	552.9
69	4.0000	.27500	74.000	.2910-01	.2410-01	.3240-01	.1431-02	.1188-02	.1594-02	.9400	11.59	553.3
69	4.0000	.30000	75.000	.3140-01	.2610-01	.3500-01	.1547-02	.1284-02	.1737-02	1.017	13.27	552.9
69	4.0000	.32500	76.000	.2600-01	.2160-01	.2900-01	.1281-02	.1064-02	.1425-02	.8440	11.02	551.6
69	4.0000	.35000	77.000	.2760-01	.2290-01	.3080-01	.1358-02	.1128-02	.1513-02	.8950	11.88	552.0
69	4.0000	.37500	78.000	.2800-01	.2330-01	.3120-01	.1379-02	.1146-02	.1536-02	.9100	11.88	550.8
69	4.0000	.40000	80.000	.1320-01	.1090-01	.1460-01	.6475-03	.5393-03	.7206-03	.4290	5.616	547.5
69	4.0000	.42500	81.000	.8600-02	.7100-02	.9600-02	.4223-03	.3512-03	.4698-03	.2800	3.671	546.3

DATE 07 OCT 75

OH-74 (AEDC V419-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 144

OH-74 (AEDC V419-B8A) B62C12F10H18H127E32VBR19

(RV8001)

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H(9TO) BTU/ R FT2SEC	H(10I) BTU/ R FT2SEC	H(1AH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
69	4.0000	.45000	62.000	.5800-02	.4900-02	.8500-02	.2876-03	.2192-03	.3199-03	.1910	2.478	544.9
69	4.0000	.47500	63.000	.4200-02	.3500-02	.4700-02	.2079-03	.1730-03	.2313-03	.1380	1.762	544.7
69	4.0000	.50000	64.000	.2600-02	.2200-02	.2900-02	.1297-03	.1079-03	.1442-03	.8600-01	1.071	543.7
69	4.0000	.52500	65.000	.1900-02	.1600-02	.2100-02	.9449-04	.7863-04	.1051-03	.6300-01	.7800	543.7
69	4.0000	.55000	66.000	.1600-02	.1300-02	.1800-02	.7789-04	.6482-04	.8661-04	.5200-01	.6100	543.1
69	4.0000	.60000	67.000	.1300-02	.1100-02	.1500-02	.6622-04	.5512-04	.7364-04	.4400-01	.4980	542.5
69	4.0000	.65000	68.000	.1500-02	.1300-02	.1700-02	.7479-04	.6222-04	.8312-04	.5000-01	.5860	542.9
69	4.0000	.70000	69.000	.1400-02	.1100-02	.1500-02	.6643-04	.5529-04	.7388-04	.4400-01	.4940	543.5
69	4.0000	.75000	70.000	.2900-02	.2400-02	.3200-02	.1412-03	.1175-03	.1571-03	.9400-01	1.049	543.6
69	4.0000	.80000	75.000	.1400-02	.1200-02	.1500-02	.6848-04	.5697-04	.7617-04	.4600-01	.5490	544.7
69	4.0000	.85000	76.000	.2000-02	.1600-02	.2200-02	.9595-04	.7981-04	.1067-03	.6400-01	.7560	545.2
69	4.0000	.87500	77.000	.1200-02	.1000-02	.1300-02	.5882-04	.4893-04	.6544-04	.3900-01	.5120	545.4
69	4.0000	.90000	78.000	.2600-02	.2100-02	.2900-02	.1270-03	.1056-03	.1414-03	.8400-01	1.092	546.3
69	4.0000	.92500	79.000	.5400-02	.4500-02	.6000-02	.2671-03	.2220-03	.2972-03	.1770	2.187	547.6
69	4.0000	.95000	80.000	.6700-02	.5500-02	.7400-02	.3281-03	.2727-03	.3652-03	.2170	2.543	548.1

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 145

OH-74 (AEDC V41B-B8A) B62C12F10H16W127E52V8R19

(RVB002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
76	7.880	19.83	81.70	1179.	-174.3	1.000	87.90	.9000-02	.4010	3619.	.8816-05	.7074-07

RUN NUMBER	RN/L X10.6 /FT	HREF BTU/ R FT ² SEC /FT	STN NO R= .0175 .6034-01
76	.4511	.1530-01	.6034-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19TO BTU/ R FT ² SEC	H1TO BTU/ R FT ² SEC	H1TAH BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTAOT DEG. R /SEC	TH DEG. R
76	1.0000	.27500	1.0000	.1430-01	.1160-01	.1610-01	.2185-03	.1780-03	.2465-03	.1130	1.176	542.0
76	1.0000	.30000	2.0000	.1220-01	.1000-01	.1380-01	.1872-03	.1526-03	.2112-03	.9700-01	1.033	541.6
76	1.0000	.32500	3.0000	.1020-01	.8300-02	.1150-01	.1563-03	.1274-03	.1763-03	.8100-01	.8350	541.1
76	1.0000	.35000	4.0000	.9800-02	.8000-02	.1110-01	.1507-03	.1228-03	.1699-03	.7800-01	.8130	541.1
76	1.0000	.37500	5.0000	.7900-02	.6500-02	.9000-02	.1214-03	.9896-04	.1370-03	.6300-01	.6640	541.4
76	1.0000	.40000	6.0000	.9100-02	.7500-02	.1030-01	.1398-03	.1140-03	.1577-03	.7300-01	.7470	541.1
76	1.0000	.42500	7.0000	.8900-02	.7300-02	.1010-01	.1365-03	.1112-03	.1539-03	.7100-01	.7360	541.3
76	1.0000	.45000	8.0000	.1120-01	.9100-02	.1260-01	.1712-03	.1395-03	.1931-03	.8900-01	.9110	541.3
76	1.0000	.47500	9.0000	.1340-01	.1090-01	.1510-01	.2050-03	.1671-03	.2313-03	.1070	1.066	541.1
76	1.0000	.50000	10.000	.1630-01	.1330-01	.1840-01	.2496-03	.2035-03	.2816-03	.1300	1.316	541.1
76	1.0000	.52500	11.000	.1930-01	.1570-01	.2180-01	.2950-03	.2405-03	.3328-03	.1530	1.555	541.4
76	1.0000	.55000	12.000	.2020-01	.1650-01	.2280-01	.3088-03	.2517-03	.3483-03	.1600	1.612	541.4
76	1.0000	.60000	13.000	.2770-01	.2260-01	.3130-01	.4240-03	.3455-03	.4783-03	.2200	2.230	542.2
76	1.0000	.65000	14.000	.4050-01	.3300-01	.4570-01	.6201-03	.5051-03	.6998-03	.3210	3.254	543.2
76	1.0000	.70000	15.000	.3470-01	.2820-01	.3910-01	.5302-03	.4319-03	.5984-03	.2750	2.683	543.4
76	1.0000	.75000	16.000	.2190-01	.1790-01	.2480-01	.3355-03	.2732-03	.3786-03	.1740	1.758	543.7
76	1.0000	.80000	17.000	.1160-01	.9500-02	.1310-01	.1778-03	.1448-03	.2006-03	.9200-01	.8920	543.3
76	2.0000	.26500	18.000	.1320-01	.1070-01	.1490-01	.2014-03	.1641-03	.2273-03	.1050	1.227	542.2
76	2.0000	.33700	19.000	.1260-01	.1020-01	.1420-01	.1923-03	.1567-03	.2169-03	.1000+00	1.178	541.8
76	2.0000	.39000	20.000	.1260-01	.1030-01	.1420-01	.1930-03	.1573-03	.2177-03	.1000+00	1.184	541.4
76	2.0000	.42600	21.000	.1640-01	.1340-01	.1850-01	.2512-03	.2047-03	.2833-03	.1300	1.531	541.9
76	2.0000	.47800	22.000	.2900-01	.2280-01	.3150-01	.4278-03	.3487-03	.4826-03	.2220	2.478	541.8

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 146

(RV8002)

OH-74 (AEDC V41B-B8A) B62C12F10H16M127E52V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN1 BTU/ R FT2SEC	ODOT BTU/ R FT2SEC	DTHOT DEC R /SEC	TW DEC. R
76	2.0000	.53000	23.000	.3560-01	.2900-01	.4020-01	.5453-03	.4443-03	.6153-03	.2830	3.149	542.9
76	2.0000	.56700	24.000	.4640-01	.3780-01	.5230-01	.7091-03	.5776-03	.8002-03	.3670	3.993	543.2
76	2.0000	.62000	25.000	.3770-01	.3070-01	.4260-01	.5773-03	.4702-03	.6514-03	.2990	3.251	543.1
76	2.0000	.67000	26.000	.2230-01	.1820-01	.2520-01	.3412-03	.2781-03	.3848-03	.1770	1.931	541.0
76	2.0000	.70500	27.000	.1700-01	.1380-01	.1910-01	.2595-03	.2115-03	.2927-03	.1350	1.452	541.9
76	2.0000	.75000	28.000	.1300-01	.1060-01	.1470-01	.1988-03	.1820-03	.2243-03	.1030	1.133	542.2
76	2.0000	.80000	29.000	.9800-02	.8000-02	.1110-01	.1504-03	.1225-03	.1697-03	.7800-01	.8610	542.5
76	2.0000	.82400	30.000	.2900-02	.2300-02	.3200-02	.4392-04	.3579-04	.4694-04	.2300-01	.3180	541.8
76	3.0000	.20000	31.000	.3090-01	.2510-01	.3490-01	.4723-03	.3846-03	.5331-03	.2440	2.589	544.3
76	3.0000	.22500	32.000	.2250-01	.1840-01	.2540-01	.3448-03	.2808-03	.3891-03	.1780	1.997	543.7
76	3.0000	.25000	33.000	.1770-01	.1440-01	.2000-01	.2711-03	.2208-03	.3059-03	.1400	1.573	543.2
76	3.0000	.27500	34.000	.1430-01	.1160-01	.1610-01	.2187-03	.1782-03	.2467-03	.1130	1.359	542.5
76	3.0000	.30000	35.000	.1300-01	.1060-01	.1460-01	.1983-03	.1616-03	.2237-03	.1030	1.276	541.9
76	3.0000	.32500	36.000	.1320-01	.1080-01	.1490-01	.2025-03	.1650-03	.2284-03	.1050	1.234	541.8
76	3.0000	.35000	37.000	.1380-01	.1130-01	.1560-01	.2118-03	.1726-03	.2389-03	.1100	1.278	541.6
76	3.0000	.37500	38.000	.1420-01	.1160-01	.1600-01	.2176-03	.1774-03	.2455-03	.1130	1.327	541.6
76	3.0000	.40000	39.000	.2170-01	.1770-01	.2450-01	.3322-03	.2708-03	.3746-03	.1730	2.039	541.1
76	3.0000	.42500	40.000	.2990-01	.2440-01	.3380-01	.4577-03	.3729-03	.5163-03	.2370	2.817	542.2
76	3.0000	.45000	41.000	.3560-01	.2900-01	.4020-01	.5447-03	.4438-03	.6145-03	.2830	3.232	542.3
76	3.0000	.47500	42.000	.4040-01	.3290-01	.4560-01	.6175-03	.5031-03	.6968-03	.3200	3.567	542.8
76	3.0000	.50000	43.000	.4430-01	.3610-01	.5000-01	.6772-03	.5516-03	.7642-03	.3510	3.907	543.4
76	3.0000	.52500	44.000	.4290-01	.3490-01	.4840-01	.6958-03	.5342-03	.7400-03	.3400	3.986	543.0
76	3.0000	.55000	45.000	.3660-01	.2990-01	.4130-01	.5605-03	.4567-03	.6324-03	.2910	3.239	542.7
76	3.0000	.60000	46.000	.2120-01	.1720-01	.2390-01	.3237-03	.2638-03	.3652-03	.1680	1.828	542.0
76	3.0000	.65000	47.000	.1350-01	.1100-01	.1530-01	.2072-03	.1689-03	.2337-03	.1080	1.143	541.7
76	3.0000	.70000	48.000	.1000-01	.8100-02	.1130-01	.1527-03	.1244-03	.1722-03	.7900-01	.8750	542.0
76	3.0000	.75000	49.000	.8400-02	.6900-02	.9500-02	.1292-03	.1053-03	.1457-03	.6700-01	.7290	542.1
76	3.0000	.80000	50.000	.7000-02	.5700-02	.7900-02	.1075-03	.8757-04	.1212-03	.5600-01	.5980	542.3
76	3.0000	.85000	51.000	.1200-02	.1000-02	.1400-02	.1890-04	.1540-04	.2133-04	.1000-01	.1210	542.5
76	3.0000	.87500	52.000	.4900-02	.4000-02	.5500-02	.7477-04	.6090-04	.8439-04	.3900-01	.4790	543.3
76	3.0000	.90000	53.000	.6200-02	.5100-02	.7000-02	.9506-04	.7741-04	.1073-03	.4900-01	.6850	543.9
76	3.0000	.92500	54.000	.7400-02	.6000-02	.8400-02	.1135-03	.9244-04	.1281-03	.5900-01	.7690	544.1
76	3.0000	.95000	55.000	.6100-02	.5000-02	.6900-02	.9336-04	.7605-04	.1053-03	.4800-01	.4900	543.1
76	4.0000	.20000	71.000	.3480-01	.2830-01	.3930-01	.5325-03	.4333-03	.6012-03	.2740	3.132	545.8
76	4.0000	.22500	72.000	.2770-01	.2260-01	.3130-01	.4240-03	.3453-03	.4788-03	.2190	2.569	544.4
76	4.0000	.25000	73.000	.2020-01	.1650-01	.2280-01	.3091-03	.2517-03	.3488-03	.1600	1.875	543.8
76	4.0000	.27500	74.000	.1660-01	.1350-01	.1870-01	.2537-03	.2066-03	.2863-03	.1310	1.627	543.2
76	4.0000	.30000	56.000	.1520-01	.1240-01	.1710-01	.2324-03	.1893-03	.2622-03	.1200	1.579	542.8
76	4.0000	.32500	57.000	.1750-01	.1420-01	.1970-01	.2669-03	.2175-03	.3012-03	.1380	1.816	542.5
76	4.0000	.35000	58.000	.2500-01	.2040-01	.2820-01	.3629-03	.3120-03	.4320-03	.1990	2.604	542.6
76	4.0000	.37500	59.000	.3660-01	.2980-01	.4130-01	.5601-03	.4562-03	.6320-03	.2900	3.802	543.3
76	4.0000	.40000	60.000	.4250-01	.3460-01	.4790-01	.6495-03	.5290-03	.7330-03	.3360	4.409	543.3
76	4.0000	.42500	61.000	.3690-01	.3010-01	.4160-01	.5644-03	.4597-03	.6369-03	.2320	3.831	543.3

DATE 07 OCT 75 OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RVB002)

OH-74 (AEDC V41B-B8A) 882C12F10M16.1-27E52V8R19

RUN NUMBER	TRAPE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTAOT DEG. R /SEC	TH DEG. R
76	4.0000	.49000	62.000	.2980-01	.2410-01	.3340-01	.4533-03	.3493-03	.5115-03	.2350	3.046	542.7
76	4.0000	.47500	63.000	.2370-01	.1930-01	.2870-01	.3620-03	.2950-03	.4085-03	.1880	2.393	542.4
76	4.0000	.50000	64.000	.1640-01	.1330-01	.1840-01	.2501-03	.2038-03	.2822-03	.1300	1.609	542.0
76	4.0000	.52500	65.000	.1300-01	.1060-01	.1470-01	.1991-03	.1623-03	.2247-03	.1030	1.281	541.8
76	4.0000	.55000	66.000	.1150-01	.9400-02	.1300-01	.1759-03	.1434-03	.1885-03	.9100-01	1.073	541.7
76	4.0000	.60000	67.000	.7700-02	.6300-02	.8700-02	.1184-03	.9649-04	.1335-03	.6200-01	.6930	541.2
76	4.0000	.65000	68.000	.6100-02	.4900-02	.6800-02	.9261-04	.7548-04	.1045-03	.4800-01	.5650	541.7
76	4.0000	.70000	69.000	.5500-02	.4500-02	.6200-02	.8411-04	.6853-04	.9490-04	.4400-01	.4860	542.6
76	4.0000	.75000	70.000	.5400-02	.4400-02	.6100-02	.8302-04	.6765-04	.9365-04	.4300-01	.4810	542.0
76	4.0000	.80000	75.000	.3100-02	.2500-02	.3500-02	.4777-04	.3892-04	.5390-04	.2500-01	.2990	542.5
76	4.0000	.85000	76.000	.6600-02	.5400-02	.7500-02	.1014-03	.8284-04	.1144-03	.5300-01	.6250	541.4
76	4.0000	.87500	77.000	.1900-02	.1600-02	.2200-02	.2921-04	.2381-04	.3296-04	.1500-01	.1990	541.9
76	4.0000	.90000	78.000	.2100-02	.1700-02	.2400-02	.3217-04	.2621-04	.3629-04	.1700-01	.2160	542.2
76	4.0000	.92500	79.000	.5400-02	.4400-02	.6000-02	.8195-04	.6678-04	.9246-04	.4300-01	.5270	542.2
76	4.0000	.95000	80.000	.3000-03	.3000-03	.4000-03	.4823-05	.3930-05	.5440-05	.3000-02	.2900-01	541.8

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 148

OH-74 (AEDC V41B-88A) B62C12F10M16H127E52V8R19

(RV8002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
77	7.680	24.80	81.90	1177.	-168.7	1.000	87.70	.9000-02	.4020	3616.	.8853-05	.7062-07

RUN NUMBER	RN/L X10 6 /FT	H-REF BTU/ R FT ² SEC /FT	STN NO R= .0175 .6020-01
77	.4533	.1531-01	.6020-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAX	H1ST0 BTU/ R FT ² SEC	H1T0 BTU/ R FT ² SEC	H1TAH BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTHOT DEG. R /SEC	TH DEG. R
77	1.0000	.27500	1.0000	.1620-01	.1320-01	.1830-01	.2477-03	.2019-03	.2795-03	.1280	1.332	541.0
77	1.0000	.30000	2.0000	.1200-01	.9800-02	.1350-01	.1835-03	.1496-03	.2070-03	.9500-01	1.011	541.0
77	1.0000	.32500	3.0000	.9100-02	.7400-02	.1030-01	.1392-03	.1134-03	.1570-03	.7200-01	.7430	540.6
77	1.0000	.35000	4.0000	.9900-02	.8100-02	.1120-01	.1521-03	.1240-03	.1715-03	.7900-01	.8190	540.4
77	1.0000	.37500	5.0000	.1050-01	.8900-02	.1180-01	.1602-03	.1306-03	.1808-03	.8300-01	.8740	540.9
77	1.0000	.40000	6.0000	.1190-01	.9700-02	.1350-01	.1827-03	.1489-03	.2080-03	.9500-01	.9740	540.7
77	1.0000	.42500	7.0000	.1390-01	.1140-01	.1570-01	.2136-03	.1741-03	.2409-03	.1110	1.150	540.7
77	1.0000	.45000	8.0000	.2000-01	.1630-01	.2260-01	.3051-03	.2494-03	.3453-03	.1590	1.623	541.2
77	1.0000	.47500	9.0000	.2100-01	.1710-01	.2350-01	.3209-03	.2615-03	.3621-03	.1660	1.692	541.7
77	1.0000	.50000	10.000	.2270-01	.1250-01	.2560-01	.3480-03	.2835-03	.3827-03	.1800	1.826	541.7
77	1.0000	.52500	11.000	.3390-01	.2760-01	.3820-01	.5185-03	.4223-03	.5851-03	.2680	2.717	542.2
77	1.0000	.55000	12.000	.3820-01	.3110-01	.4310-01	.5847-03	.4762-03	.6599-03	.3020	3.034	542.5
77	1.0000	.60000	13.000	.3200-01	.2610-01	.3610-01	.4902-03	.3992-03	.5932-03	.2530	2.565	542.9
77	1.0000	.65000	14.000	.1960-01	.1590-01	.2210-01	.2994-03	.2439-03	.3380-03	.1550	1.567	542.8
77	1.0000	.70000	15.000	.1090-01	.8800-02	.1230-01	.1663-03	.1394-03	.1877-03	.8600-01	.8400	542.8
77	1.0000	.75000	16.000	.8400-02	.6900-02	.9500-02	.1292-03	.1052-03	.1458-03	.6700-01	.6770	542.4
77	1.0000	.80000	17.000	.5900-02	.4800-02	.5700-02	.9038-04	.7360-04	.1020-03	.4700-01	.4520	542.8
77	2.0000	.85000	18.000	.1590-01	.1300-01	.1800-01	.2439-03	.1988-03	.2751-03	.1270	1.487	540.3
77	2.0000	.33700	19.000	.1450-01	.1180-01	.1630-01	.2213-03	.1808-03	.2501-03	.1150	1.361	539.8
77	2.0000	.39000	20.000	.1930-01	.1570-01	.2170-01	.2951-03	.2405-03	.3328-03	.1530	1.808	540.3
77	2.0000	.42600	21.000	.2900-01	.2360-01	.3270-01	.4440-03	.3618-03	.5009-03	.2300	2.701	541.2
77	2.0000	.47800	22.000	.4040-01	.3290-01	.4560-01	.6186-03	.5039-03	.6981-03	.3200	3.566	542.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 149

OH-74 (AEDC V41B-B8A) 862C12F10M16M127E52V8R19

(RV8002)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R F12SEC	H1T0 BTU/ R F12SEC	H1TAN BTU/ R F12SEC	QDOT BTU/ F12SEC	DTWDT DEG. R /SEC	TH DEG. R
77	2.0000	.53000	23.000	.3250-01	.2650-01	.3670-01	.4981-03	.4957-03	.5622-03	.2570	2.867	542.9
77	2.0000	.56700	24.000	.2120-01	.1720-01	.2390-01	.3239-03	.2638-03	.3655-03	.1670	1.820	542.5
77	2.0000	.62000	25.000	.1330-01	.1080-01	.1500-01	.2035-03	.1658-03	.2290-03	.1050	1.145	542.2
77	2.0000	.67000	26.000	.8700-02	.7100-02	.9900-02	.1337-03	.1089-03	.1508-03	.6900-01	.7510	542.6
77	2.0000	.70500	27.000	.7500-02	.6100-02	.8400-02	.1144-03	.9322-04	.1291-03	.5900-01	.6380	541.9
77	2.0000	.75000	28.000	.6000-02	.4900-02	.6800-02	.9218-04	.7511-04	.1040-03	.4800-01	.5250	541.4
77	2.0000	.80000	29.000	.5100-02	.4200-02	.5800-02	.7852-04	.6398-04	.8859-04	.4100-01	.4490	541.6
77	2.0000	.82400	30.000	.7000-03	.6000-03	.8000-03	.1066-04	.8685-05	.1203-04	.6000-02	.7700	541.7
77	2.0000	.20000	31.000	.3170-01	.2580-01	.3570-01	.4847-03	.3946-03	.5473-03	.2500	2.648	544.3
77	2.0000	.22500	32.000	.2580-01	.2100-01	.2910-01	.3949-03	.3216-03	.4456-03	.2040	2.286	542.5
77	3.0000	.25000	33.000	.2090-01	.1700-01	.2360-01	.3201-03	.2608-03	.3611-03	.1660	1.859	541.3
77	3.0000	.27500	34.000	.1600-01	.1300-01	.1800-01	.2446-03	.1994-03	.2759-03	.1270	1.524	540.1
77	3.0000	.30000	35.000	.1460-01	.1190-01	.1650-01	.2241-03	.1827-03	.2527-03	.1160	1.445	539.4
77	3.0000	.32500	36.000	.1580-01	.1290-01	.1780-01	.2413-03	.1968-03	.2721-03	.1250	1.475	539.3
77	3.0000	.35000	37.000	.1810-01	.1480-01	.2050-01	.2777-03	.2264-03	.3132-03	.1440	1.679	539.6
77	3.0000	.37500	38.000	.2550-01	.2080-01	.2870-01	.3901-03	.3180-03	.4399-03	.2030	2.381	540.8
77	3.0000	.40000	39.000	.3210-01	.2610-01	.3620-01	.4912-03	.4003-03	.5541-03	.2550	3.007	541.9
77	3.0000	.42500	40.000	.4160-01	.3390-01	.4690-01	.6363-03	.5183-03	.7179-03	.3290	3.905	541.7
77	3.0000	.45000	41.000	.3820-01	.3110-01	.4310-01	.5851-03	.4767-03	.6601-03	.3030	3.464	541.6
77	3.0000	.47500	42.000	.3240-01	.2640-01	.3660-01	.4966-03	.4046-03	.5603-03	.2570	2.867	541.5
77	3.0000	.50000	43.000	.2760-01	.2250-01	.3120-01	.4231-03	.3447-03	.4773-03	.2190	2.442	541.7
77	3.0000	.52500	44.000	.1700-01	.1390-01	.1920-01	.2607-03	.2124-03	.2941-03	.1350	1.585	541.5
77	3.0000	.55000	45.000	.1330-01	.1090-01	.1510-01	.2043-03	.1665-03	.2305-03	.1060	1.180	541.4
77	3.0000	.60000	46.000	.9900-02	.8000-02	.1110-01	.1512-03	.1232-03	.1706-03	.7800-01	.8520	541.6
77	3.0000	.65000	47.000	.6800-02	.5600-02	.7700-02	.1045-03	.8515-04	.1179-03	.5400-01	.5750	541.5
77	3.0000	.70000	48.000	.5500-02	.4400-02	.6200-02	.8355-04	.6808-04	.9425-04	.4300-01	.4780	541.1
77	3.0000	.75000	49.000	.3900-02	.3200-02	.4400-02	.5978-04	.4872-04	.6744-04	.3100-01	.3370	541.0
77	3.0000	.80000	50.000	.2500-02	.2000-02	.2800-02	.3776-04	.3577-04	.4260-04	.2000-01	.2100	541.1
77	3.0000	.85000	51.000	.2200-02	.1800-02	.2500-02	.3365-04	.2741-04	.3797-04	.1700-01	.2160	542.2
77	3.0000	.87500	52.000	.4300-02	.3500-02	.4800-02	.6544-04	.5330-04	.7385-04	.3400-01	.4190	542.5
77	3.0000	.90000	53.000	.4400-02	.3600-02	.4900-02	.6695-04	.5452-04	.7557-04	.3500-01	.4810	543.1
77	3.0000	.92500	54.000	.3800-02	.3100-02	.4300-02	.5844-04	.4759-04	.6596-04	.3000-01	.3960	543.1
77	3.0000	.95000	55.000	.3500-02	.2800-02	.3900-02	.5297-04	.4314-04	.5978-04	.2700-01	.2770	542.6
77	4.0000	.20000	71.000	.3740-01	.3040-01	.4220-01	.5723-03	.4656-03	.6464-03	.2940	3.353	546.0
77	4.0000	.22500	72.000	.2870-01	.2340-01	.3240-01	.4392-03	.3376-03	.4958-03	.2270	2.657	543.5
77	4.0000	.25000	73.000	.2280-01	.1860-01	.2580-01	.3495-03	.2847-03	.3944-03	.1810	2.120	542.5
77	4.0000	.27500	74.000	.2090-01	.1700-01	.2360-01	.3197-03	.2675-03	.3607-03	.1650	2.050	541.7
77	4.0000	.30000	75.000	.1780-01	.1450-01	.2010-01	.2727-03	.2223-03	.3076-03	.1410	1.857	540.6
77	4.0000	.32500	76.000	.2610-01	.2120-01	.2940-01	.3989-03	.3251-03	.4499-03	.2070	2.715	540.8
77	4.0000	.35000	77.000	.3760-01	.3060-01	.4240-01	.5755-03	.4689-03	.6493-03	.2980	3.907	541.8
77	4.0000	.37500	78.000	.3470-01	.2820-01	.3910-01	.5309-03	.4324-03	.5988-03	.2750	3.606	541.6
77	4.0000	.40000	79.000	.2450-01	.2000-01	.2760-01	.3752-03	.3057-03	.4232-03	.1940	2.551	541.2
77	4.0000	.42500	80.000	.1720-01	.1400-01	.1940-01	.2630-03	.2143-03	.2967-03	.1360	1.788	541.3

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 150

OH-74 (AEDC V41B-88A) B82C12F10H16H127E52V8R19

(RV8002)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19TO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
77	4.0000	.45000	62.000	.1280-01	.1040-01	.1440-01	.1961-03	.1598-03	.2212-03	.1020	1.318	541.1
77	4.0000	.47500	63.000	.1060-01	.8600-02	.1200-01	.1623-03	.1323-03	.1831-03	.8400-01	1.072	541.2
77	4.0000	.50000	64.000	.8600-02	.7000-02	.9700-02	.1321-03	.1076-03	.1490-03	.6800-01	.8480	541.3
77	4.0000	.52500	65.000	.7000-02	.5700-02	.7900-02	.1074-03	.8747-04	.1211-03	.5600-01	.6990	541.4
77	4.0000	.55000	66.000	.5600-02	.4500-02	.6300-02	.8514-04	.6937-04	.9605-04	.4400-01	.5180	541.3
77	4.0000	.60000	67.000	.4300-02	.3500-02	.4900-02	.6652-04	.5422-04	.7504-04	.3400-01	.3890	540.8
77	4.0000	.65000	68.000	.3600-02	.2900-02	.4100-02	.5542-04	.4516-04	.6252-04	.2900-01	.3370	541.3
77	4.0000	.70000	69.000	.2300-02	.1900-02	.2600-02	.3528-04	.2874-04	.3980-04	.1800-01	.2030	542.0
77	4.0000	.75000	70.000	.2500-02	.2100-02	.2900-02	.3873-04	.3156-04	.4369-04	.2000-01	.2240	541.0
77	4.0000	.80000	75.000	.9000-03	.7000-03	.1000-02	.1322-04	.1077-04	.1492-04	.7000-02	.8300-01	541.4
77	4.0000	.87500	77.000	.6000-03	.5000-03	.7000-03	.9066-05	.7389-05	.1023-04	.5000-02	.6200-01	540.8
77	4.0000	.90000	78.000	.1100-02	.9000-03	.1200-02	.1637-04	.1334-04	.1847-04	.8000-02	.1100	541.0
77	4.0000	.92500	79.000	.1000-02	.8000-03	.1200-02	.1577-04	.1285-04	.1779-04	.8000-02	.1010	540.8
77	4.0000	.95000	80.000	.3000-03	.3000-03	.4000-03	.4823-05	.3930-05	.5440-05	.3000-02	.2900-01	541.8

DATE 07 OCT 75 ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RCDOR = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	Y DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
78	7.880	29.83	82.30	1176.	-90.00	1.000	87.60	.9000-02	.4040	3615.	.8903-05	.7056-07

RUN NUMBER	RN/L X10 6	STN NO R ²
78	.4561	.6003-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAX	H(GT) BTU/ R FT2SEC	H(TO) BTU/ R FT2SEC	H(TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
78	1.0000	.27500	1.0000	.1570-01	.1280-01	.1780-01	.2417-03	.1968-03	.2727-03	.1250	1.294	542.2
78	1.0000	.30000	2.0000	.1320-01	.1080-01	.1490-01	.2033-03	.1656-03	.2294-03	.1050	1.116	541.7
78	1.0000	.32500	3.0000	.1030-01	.8400-02	.1170-01	.1587-03	.1293-03	.1790-03	.8200-01	.8430	541.5
78	1.0000	.5000	4.0000	.1220-01	.9900-02	.1380-01	.1874-03	.1527-03	.2115-03	.9700-01	1.005	541.5
78	1.0000	.37500	5.0000	.1180-01	.9600-02	.1330-01	.1811-03	.1472-03	.2044-03	.9400-01	.9840	542.1
78	1.0000	.40000	6.0000	.1770-01	.1440-01	.2000-01	.2717-03	.2113-03	.3066-03	.1400	1.442	542.0
78	1.0000	.42500	7.0000	.2030-01	.1650-01	.2290-01	.3114-03	.2435-03	.3514-03	.1610	1.663	542.7
78	1.0000	.45000	8.0000	.2420-01	.1970-01	.2730-01	.3710-03	.3021-03	.4188-03	.1910	1.915	543.0
78	1.0000	.47500	9.0000	.2500-01	.2030-01	.2820-01	.3830-03	.3119-03	.4324-03	.1970	2.009	543.1
78	1.0000	.50000	10.000	.3090-01	.2510-01	.3490-01	.4739-03	.3858-03	.5350-03	.2440	2.472	543.5
78	1.0000	.52500	11.000	.2620-01	.2130-01	.2960-01	.4019-03	.3272-03	.4537-03	.2070	2.096	543.5
78	1.0000	.55000	12.000	.1940-01	.1580-01	.2190-01	.2980-03	.2426-03	.3384-03	.1540	1.541	543.3
78	1.0000	.60000	13.000	.1120-01	.9100-02	.1260-01	.1720-03	.1400-03	.1941-03	.9900-01	.9970	543.5
78	1.0000	.65000	14.000	.9500-02	.7800-02	.1080-01	.1462-03	.1191-03	.1651-03	.7500-01	.7630	543.5
78	1.0000	.70000	15.000	.7500-02	.6100-02	.8500-02	.1158-03	.9426-04	.1307-03	.6000-01	.5930	543.5
78	1.0000	.75000	16.000	.6000-02	.5000-02	.6900-02	.9427-04	.7674-04	.1064-03	.4900-01	.4920	543.5
78	1.0000	.80000	17.000	.4300-02	.3700-02	.5100-02	.6882-04	.5603-04	.7768-04	.3500-01	.3440	542.9
78	1.0000	.85000	18.000	.1690-01	.1380-01	.1310-01	.2523-03	.2112-03	.2976-03	.1340	1.572	541.8
78	2.0000	.33700	19.000	.1490-01	.1210-01	.1680-01	.2289-03	.1864-03	.2582-03	.1190	1.397	541.4
78	2.0000	.39000	20.000	.2990-01	.2440-01	.3380-01	.4591-03	.3738-03	.5181-03	.2370	2.794	542.6
78	2.0000	.42600	21.000	.3510-01	.2860-01	.3970-01	.5394-03	.4391-03	.6090-03	.2790	3.258	543.5
78	2.0000	.47800	22.000	.2660-01	.2170-01	.3010-01	.4089-03	.3329-03	.4615-03	.2110	2.347	543.3

DATE 07 OCT 75

OH-7A (AEDC W18-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

RUN NUMBER	TIME	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R-TAN	H(90) BTU/ R FT ² SEC	H(10) BTU/ R FT ² SEC	H(14) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTWOT DEG. K /SEC	TM DEG. R
78	2.0000	53000	23.000	.1400-01	.1140-01	.1580-01	.2147-03	.1748-03	.2424-03	.1110	1.232	543.4
78	2.0000	56700	24.700	.1140-01	.0930-02	.1290-01	.1754-03	.1428-03	.1980-03	.9000-01	.9820	543.3
78	2.0000	62000	25.000	.8600-02	.7000-02	.9700-02	.1315-03	.1070-03	.1484-03	.6800-01	.7370	543.1
78	2.0000	67000	26.000	.5800-02	.4700-02	.6800-02	.8924-04	.7266-04	.1007-03	.4600-01	.5000	543.0
78	2.0000	70500	27.000	.5400-02	.4400-02	.6100-02	.8260-04	.6726-04	.9323-04	.4300-01	.4590	542.6
78	2.0000	75000	28.000	.5400-02	.4400-02	.6100-02	.8260-04	.6726-04	.9323-04	.4300-01	.4680	541.9
78	2.0000	80000	29.000	.3900-02	.3200-02	.4400-02	.6003-03	.4890-04	.6775-04	.3100-01	.3420	541.9
78	2.0000	82400	30.000	.2000-03	.2000-03	.2000-03	.3224-05	.2626-05	.3639-05	.2000-02	.2300-01	541.9
78	3.0000	70000	31.000	.3140-01	.2550-01	.3540-01	.4812-03	.3911-03	.5436-03	.2470	2.613	546.0
78	3.0000	72500	32.000	.2730-01	.2220-01	.3080-01	.4191-03	.3410-03	.4732-03	.2150	2.411	544.4
78	3.0000	75000	33.000	.2140-01	.1740-01	.2410-01	.3279-03	.2670-03	.3701-03	.1690	1.892	543.1
78	3.0000	77500	34.000	.1760-01	.1430-01	.1980-01	.2699-03	.2199-03	.3045-03	.1390	1.671	541.9
78	3.0000	80000	35.000	.1500-01	.1220-01	.1690-01	.2302-03	.1875-03	.2597-03	.1190	1.476	541.1
78	3.0000	82500	36.000	.1810-01	.1480-01	.2040-01	.2781-03	.2266-03	.3138-03	.1440	1.689	541.2
78	3.0000	85000	37.000	.2570-01	.2090-01	.2900-01	.3944-03	.3213-03	.4450-03	.2040	2.307	541.7
78	3.0000	87500	38.000	.3630-01	.2950-01	.4100-01	.5569-03	.4535-03	.6285-03	.2870	3.370	542.7
78	3.0000	90000	39.000	.2630-01	.2140-01	.2970-01	.4035-03	.3286-03	.4554-03	.2080	2.457	542.2
78	3.0000	92500	40.000	.2380-01	.1940-01	.2690-01	.3651-03	.2973-03	.4121-03	.1880	2.233	542.5
78	3.0000	95000	41.000	.1940-01	.1580-01	.2200-01	.2985-03	.2431-03	.3369-03	.1540	1.760	542.5
78	3.0000	97500	42.000	.1420-01	.1200-01	.1600-01	.2174-03	.1770-03	.2453-03	.1120	1.251	542.3
78	3.0000	100000	43.000	.1180-01	.0960-02	.1330-01	.1806-03	.1471-03	.2038-03	.9300-01	1.038	542.6
78	3.0000	102500	44.000	.9200-02	.7500-02	.1040-01	.1416-03	.1153-03	.1598-03	.7300-01	.8570	542.5
78	3.0000	105000	45.000	.8600-02	.7000-02	.9700-02	.1322-03	.1077-03	.1492-03	.6800-01	.7600	542.4
78	3.0000	107500	46.000	.6300-02	.5200-02	.7200-02	.9740-04	.7933-04	.1099-03	.5000-01	.5470	542.1
78	3.0000	110000	47.000	.3600-02	.2900-02	.4000-02	.5498-04	.4478-04	.5862-04	.2800-01	.3020	541.9
78	3.0000	112500	48.000	.3400-02	.2800-02	.3900-02	.5284-04	.4304-04	.5686-04	.2700-01	.3020	541.8
78	3.0000	115000	49.000	.2300-02	.1900-02	.2600-02	.3542-04	.2886-04	.3996-04	.1800-01	.1990	541.4
78	3.0000	117500	50.000	.4000-03	.3000-03	.5000-03	.6213-05	.5061-05	.7011-05	.3000-02	.3400-01	541.6
78	3.0000	120000	51.000	.1100-02	.8000-03	.1200-02	.1592-04	.1297-04	.1797-04	.8000-02	.1020	542.8
78	3.0000	122500	52.000	.5000-03	.4000-03	.6000-03	.8016-05	.6527-05	.9048-05	.4000-02	.5100-01	542.8
78	3.0000	125000	53.000	.4000-03	.3000-03	.4000-03	.5902-05	.4806-05	.6663-05	.3000-02	.4200-01	543.0
78	3.0000	127500	54.000	.1500-02	.1200-02	.1700-02	.2332-04	.1899-04	.2632-04	.1200-01	.1580	543.0
78	3.0000	130000	55.000	.7000-03	.6000-03	.8000-03	.1141-04	.9295-05	.1288-04	.6000-02	.6000-01	542.3
78	4.0000	20000	71.000	.3720-01	.3020-01	.4200-01	.5706-03	.4638-03	.6448-03	.2910	3.323	547.7
78	4.0000	22500	72.000	.3090-01	.2510-01	.3470-01	.4741-03	.3857-03	.5354-03	.2430	2.651	545.2
78	4.0000	25000	73.000	.2270-01	.1840-01	.2460-01	.3476-03	.2829-03	.3925-03	.1790	2.097	544.0
78	4.0000	27500	74.000	.2030-01	.1650-01	.2290-01	.3108-03	.2530-03	.3508-03	.1600	1.983	543.1
78	4.0000	30000	75.000	.2370-01	.1930-01	.2670-01	.3632-03	.2958-03	.4170-03	.1870	2.457	542.6
78	4.0000	32500	76.000	.2980-01	.2410-01	.3350-01	.4549-03	.3704-03	.5135-03	.2340	3.073	543.1
78	4.0000	35000	77.000	.2670-01	.2170-01	.3010-01	.4095-03	.3335-03	.4622-03	.2110	2.768	542.8
78	4.0000	37500	78.000	.1950-01	.1590-01	.2210-01	.2999-03	.2442-03	.3384-03	.1550	2.031	542.2
78	4.0000	40000	79.000	.1370-01	.1110-01	.1540-01	.2098-03	.1709-03	.2368-03	.1080	1.421	542.3
78	4.0000	42500	80.000	.1040-01	.8400-02	.1170-01	.1590-03	.1295-03	.1795-03	.8200-01	1.077	542.2

DATE 07 OCT 75

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 153

04-74 (AEDC V418-B8A) B62C12F10H16H12T52VBR19

(RVB002)

RUN NUMBER	TRA/E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H/STO BTU/ R	H/TO BTU/ R	H/TAN BTU/ R	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TN DEG. R
78	4.0000	.45000	62.000	.7500-02	.6400-02	.8900-02	.1209-03	.9948-04	.1365-03	.6200-01	.9090	542.5
78	4.0000	.47500	63.000	.6600-02	.5400-02	.7400-02	.1010-03	.8225-04	.1140-03	.5200-01	.6640	542.2
78	4.0000	.50000	64.000	.4100-02	.3400-02	.4500-02	.6314-04	.5143-04	.7125-04	.3300-01	.4040	541.9
78	4.0000	.52500	65.000	.4400-02	.3500-02	.5000-02	.6784-04	.5509-04	.7633-04	.3500-01	.4330	541.9
78	4.0000	.55000	66.000	.2600-02	.2100-02	.2900-02	.3999-04	.3258-04	.4513-04	.2100-01	.2430	541.6
78	4.0000	.60000	67.000	.2800-02	.2300-02	.3200-02	.4320-04	.3520-04	.4874-04	.2200-01	.2520	541.0
78	4.0000	.65000	68.000	.2200-02	.1800-02	.2400-02	.3315-04	.2701-04	.3741-04	.1700-01	.2010	541.3
78	4.0000	.70000	69.000	.2500-02	.2100-02	.2900-02	.3908-04	.3183-04	.4410-04	.2000-01	.2250	542.1
78	4.0000	.75000	70.000	.1500-02	.1300-02	.1700-02	.2378-04	.1936-04	.2681-04	.1200-01	.1370	541.1
78	4.0000	.80000	75.000	.2000-03	.2000-03	.2000-03	.3324-05	.2708-05	.3751-05	.2000-02	.2100-01	541.6
78	4.0000	.85000	76.000	.5200-02	.4300-02	.5900-02	.8046-04	.6555-04	.9078-04	.4200-01	.4940	541.3
78	4.0000	.87500	77.000	.0000	.0000	.1000-03	.7287-06	.5937-06	.8221-06	.0000	.5000-02	541.0
78	4.0000	.90000	78.000	.2000-03	.1000-03	.2000-03	.2402-05	.1957-05	.2711-05	.1000-02	.1600-01	541.3
78	4.0000	.92500	79.000	.1500-02	.1200-02	.1700-02	.2336-04	.1903-04	.2636-04	.1200-01	.1500	541.3
78	4.0000	.95000	80.000	.8000-03	.6000-03	.9000-03	.1175-04	.9573-05	.1326-04	.6000-02	.7100-01	541.4

04-74 (AEDC V-18-B8A) 882C12F10H18W127E52V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PMI DEG.	YAH DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
78	7.000	34.95	82.00	1174.	188.8	1.000	87.50	.9000-02	.4030	3612.	.8888-05	.7044-07

RUN NUMBER	RA/L X10 ⁶ /FT	REF BTU/ R FT ² SEC	STN NO R- .0175
79	.4556	.1531-01	.6007-01

TEST DATA

RUN NUMBER	THICK	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H(9TO) BTU/ R FT ² SEC	H(1TO) BTU/ R FT ² SEC	H(1HAN) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTAOT LA.G. R /SEC	TH DEG. R
78	1.0000	.27500	1.0000	.1460-01	.1190-01	.1650-01	.2239-03	.1823-03	.2527-03	.1150	1.195	542.0
79	1.0000	.30000	2.0000	.1340-01	.1090-01	.1510-01	.2045-03	.1665-03	.2308-03	.1050	1.118	541.8
79	1.0000	.32500	3.0000	.1020-01	.9300-02	.1150-01	.1560-03	.1271-03	.1761-03	.8000-01	.8260	541.6
79	1.0000	.35000	4.0000	.1440-01	.1180-01	.1630-01	.2210-03	.1800-03	.2495-03	.1140	1.182	541.2
79	1.0000	.37500	5.0000	.1650-01	.1350-01	.1870-01	.2534-03	.2063-03	.2860-03	.1300	1.372	542.0
79	1.0000	.40000	6.0000	.2400-01	.1950-01	.2710-01	.3671-03	.2989-03	.4144-03	.1890	1.941	542.0
79	1.0000	.42500	7.0000	.2020-01	.1650-01	.2280-01	.3097-03	.2522-03	.3450-03	.1590	1.652	542.3
79	1.0000	.45000	8.0000	.2500-01	.2030-01	.2820-01	.3824-03	.3113-03	.4316-03	.1970	2.013	542.0
79	1.0000	.47500	9.0000	.2670-01	.2170-01	.3010-01	.4087-03	.3327-03	.4615-03	.2100	2.138	542.9
79	1.0000	.50000	10.000	.1830-01	.1490-01	.2070-01	.2804-03	.2283-03	.3165-03	.1440	1.462	542.2
79	1.0000	.52500	11.000	.1990-01	.1620-01	.2250-01	.3046-03	.2480-03	.3439-03	.1570	1.587	542.5
79	1.0000	.55000	12.000	.1750-01	.1430-01	.1780-01	.2681-03	.2193-03	.3026-03	.1380	1.385	542.2
79	1.0000	.57500	13.000	.1150-01	.9300-02	.1290-01	.1755-03	.1429-03	.1981-03	.8500-01	.9150	542.4
79	1.0000	.60000	14.000	.1080-01	.8800-02	.1220-01	.1653-03	.1346-03	.1865-03	.8500-01	.8610	542.5
79	1.0000	.65000	15.000	.8100-02	.6600-02	.9100-02	.1235-03	.1005-03	.1391-03	.5300-01	.6210	542.3
79	1.0000	.70000	16.000	.5400-02	.4400-02	.6100-02	.8287-04	.6748-04	.9353-04	.4300-01	.4320	541.9
79	1.0000	.75000	17.000	.2000-02	.1600-02	.2300-02	.3098-04	.2523-04	.3497-04	.1500-01	.1550	541.8
79	1.0000	.80000	18.000	.1630-01	.1330-01	.1840-01	.2499-03	.2035-03	.2871-03	.1290	1.509	542.4
79	2.0000	.85000	19.000	.1740-01	.1420-01	.1960-01	.2663-03	.2169-03	.3006-03	.1370	1.617	541.9
79	2.0000	.90000	20.000	.2950-01	.2400-01	.3330-01	.4519-03	.3679-03	.5101-03	.2320	2.741	542.4
79	2.0000	.95000	21.000	.2720-01	.2210-01	.3070-01	.4165-03	.3391-03	.4701-03	.2140	2.514	542.3
79	2.0000	.47800	22.000	.1840-01	.1500-01	.2070-01	.2813-03	.2290-03	.3175-03	.1450	1.614	542.0

DATE 97 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 156

04-74 (AEDC V41B-B8A) B62C12F10H16W127E52VBR19

(RV8002)

RUN NUMBER	TRATE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TN DEG. R
79	4.0000	.50000	64.000	.4100-02	.3300-02	.4600-02	.6265-04	.5103-04	.7069-04	.3200-01	.4010	540.6
79	4.0000	.52500	65.000	.3500-02	.2900-02	.4000-02	.5406-04	.4404-04	.6100-04	.2800-01	.3460	540.7
79	4.0000	.55000	66.000	.4000-02	.3300-02	.4600-02	.6194-04	.5046-04	.6989-04	.3200-01	.3750	540.6
79	4.0000	.60000	67.000	.1900-02	.1500-02	.2100-02	.2895-04	.2359-04	.3266-04	.1500-01	.1680	540.3
79	4.0000	.65000	68.000	.1400-02	.1200-02	.1600-02	.2177-04	.1774-04	.2457-04	.1100-01	.1320	540.7
79	4.0000	.70000	69.000	.1800-02	.1500-02	.2100-02	.2788-04	.2270-04	.3146-04	.1400-01	.1600	541.7
79	4.0000	.75000	70.000	.1300-02	.1100-02	.1500-02	.2029-04	.1653-04	.2289-04	.1000-01	.1170	540.8
79	4.0000	.80000	75.000	.2000-03	.2000-03	.2000-03	.3324-05	.2708-05	.3751-05	.2000-02	.2100-01	541.6
79	4.0000	.87500	77.000	.0000	.0000	.1000-03	.7287-06	.5937-06	.8221-06	.0000	.5000-02	541.0
79	4.0000	.92500	79.000	-.1500-02	-.1200-02	-.1700-02	-.2336-04	-.1903-04	-.2636-04	-.1200-01	-.1500	541.3
79	4.0000	.95000	80.000	.1600-02	.1300-02	.1800-02	.2428-04	.1978-04	.2741-04	.0000	.0000	583.2

DATE 07 OCT 75

0M-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 157

ORBITER FUSELAGE

0M-74 (AEDC V41B-88A) B62C12F10M16W127E52VBR19

(R18002)

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
80	7.880	39.77	81.20	1173.	174.4	1.000	87.40	.9000-02	.3990	3610.	.6807-05	.7038-07

RUN NUMBER	RN/L X10 ⁶ /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175 .6034-01
80	.4518	.1524-01	.6034-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT ² SEC	H1T01 BTU/ R FT ² SEC	H1TAP1 BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTWDT DEG. R /SEC	TM DEG. R
80	1.0000	.27500	1.0000	.1440-01	.1170-01	.1620-01	.2187-03	.1781-03	.2469-03	.1120	1.167	541.6
80	1.0000	.30000	2.0000	.1340-01	.1090-01	.1510-01	.2041-03	.1662-03	.2303-03	.1050	1.115	541.2
80	1.0000	.32500	3.0000	.1020-01	.8300-02	.1150-01	.1559-03	.1269-03	.1759-03	.8000-01	.8240	41.2
80	1.0000	.35000	4.0000	.1770-01	.1440-01	.1990-01	.2693-03	.2193-03	.3039-03	.1390	1.439	540.8
80	1.0000	.37500	5.0000	.2050-01	.1670-01	.2310-01	.3117-03	.2538-03	.3519-03	.1600	1.695	541.7
80	1.0000	.40000	6.0000	.2170-01	.1770-01	.2450-01	.3310-03	.2696-03	.3736-03	.1700	1.751	541.3
80	1.0000	.42500	7.0000	.2000-01	.1630-01	.2260-01	.3052-03	.2485-03	.3446-03	.1570	1.628	541.6
80	1.0000	.45000	8.0000	.2790-01	.2270-01	.3150-01	.4255-03	.3464-03	.4803-03	.2190	2.238	541.5
80	1.0000	.47500	9.0000	.1840-01	.1500-01	.2080-01	.2809-03	.2287-03	.3171-03	.1440	1.471	541.6
80	1.0000	.50000	10.000	.1940-01	.1580-01	.2190-01	.2954-03	.2405-03	.3334-03	.1520	1.540	541.5
80	1.0000	.52500	11.000	.2010-01	.1640-01	.2270-01	.3070-03	.2499-03	.3465-03	.1580	1.599	541.7
80	1.0000	.55000	12.000	.1500-01	.1220-01	.1700-01	.2292-03	.1866-03	.2587-03	.1180	1.184	541.4
80	1.0000	.60000	13.000	.1220-01	.1000-01	.1380-01	.1863-03	.1517-03	.2104-03	.9500-01	.9710	541.7
80	1.0000	.65000	14.000	.1020-01	.8300-02	.1150-01	.1562-03	.1263-03	.1752-03	.8000-01	.8080	541.8
80	1.0000	.70000	15.000	.6500-02	.5300-02	.7300-02	.9917-04	.8075-04	.1119-03	.5100-01	.4990	541.3
80	1.0000	.75000	16.000	.4500-02	.3700-02	.5100-02	.6963-04	.5588-04	.7746-04	.3500-01	.3580	541.2
80	1.0000	.80000	17.000	.7000-03	.6000-03	.8000-03	.1058-04	.8615-05	.1194-04	.5000-02	.5300-01	541.2
80	2.0000	.85000	18.000	.1590-01	.1290-01	.1790-01	.2420-03	.1971-03	.2731-03	.1240	1.462	541.3
80	2.0000	.87500	19.000	.2100-01	.1710-01	.2370-01	.3197-03	.2503-03	.3608-03	.1650	1.942	541.0
80	2.0000	.39000	20.000	.2180-01	.1780-01	.2460-01	.3325-03	.2708-03	.3752-03	.1710	2.023	540.6
80	2.0000	.42600	21.000	.2630-01	.2140-01	.2970-01	.4003-03	.3260-03	.4518-03	.2060	2.420	541.0
80	2.0000	.47800	22.000	.1710-01	.1400-01	.1940-01	.2613-03	.2128-03	.2949-03	.1350	1.501	540.8

DATE 07 OCT 75

OH-7A (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 158

(RV8002)

OH-7A (AEDC V41B-B8A) 862C12F10M16W127E52V8R19

RUN NUMBER	TRAJ E	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R-TAH	H(9TO) FT2SEC	H(1TO) BTU/ R FT2SEC	H(LAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
80	2.0000	.53000	23.000	.1250-01	.1020-01	.1410-01	.1910-03	.1556-03	.2155-03	.9800-01	1.098	540.6
80	2.0000	.56700	24.000	.9600-02	.7800-02	.1080-01	.1465-03	.1193-03	.1653-03	.7500-01	.8210	540.8
80	2.0000	.62000	25.000	.7200-02	.5900-02	.8100-02	.1100-03	.8960-04	.1242-03	.5700-01	.6170	540.8
80	2.0000	.67000	26.000	.5900-02	.4700-02	.6500-02	.8834-04	.7195-04	.9969-04	.4500-01	.4950	540.8
80	2.0000	.70500	27.000	.3800-02	.3100-02	.4300-02	.5761-04	.4693-04	.6501-04	.3000-01	.3200	540.4
80	2.0000	.75000	28.000	.2100-02	.1700-02	.2300-02	.3145-04	.2562-04	.3549-04	.1600-01	.1780	540.0
80	2.0000	.80000	29.000	.8000-03	.6000-03	.9000-03	.1173-04	.9554-05	.1324-04	.6000-02	.6700-01	540.4
80	2.0000	.82400	30.000	.0000	.0000	.0000	.3199-06	.2606-06	.3610-06	.0000	.2000-02	540.7
80	3.0000	.3270-01	.31.000	.3270-01	.2660-01	.3690-01	.4979-03	.4049-03	.5625-03	.2540	2.695	545.2
80	3.0000	.22500	.32.000	.2610-01	.2130-01	.2950-01	.3983-03	.3241-03	.4499-03	.2040	2.274	543.7
80	3.0000	.25000	.33.000	.2220-01	.1800-01	.2500-01	.3378-03	.2750-03	.3814-03	.1730	1.942	542.6
80	3.0000	.27500	.34.000	.1780-01	.1450-01	.2010-01	.2716-03	.2212-03	.3066-03	.1400	1.670	541.7
80	3.0000	.30000	.35.000	.1770-01	.1440-01	.2000-01	.2694-03	.2194-03	.3040-03	.1390	1.721	540.5
80	3.0000	.32500	.36.000	.2770-01	.2260-01	.3130-01	.4222-03	.3439-03	.4764-03	.2180	2.555	540.5
80	3.0000	.35000	.37.000	.2680-01	.2180-01	.3020-01	.4083-03	.3326-03	.4607-03	.2100	2.446	540.4
80	3.0000	.37500	.38.000	.2140-01	.1750-01	.2420-01	.3265-03	.2660-03	.3685-03	.1680	1.976	540.5
80	3.0000	.40000	.39.000	.1790-01	.1460-01	.2020-01	.2724-03	.2219-03	.3074-03	.1400	1.659	540.1
80	3.0000	.42500	.40.000	.1680-01	.1370-01	.1900-01	.2560-03	.2085-03	.2888-03	.1320	1.567	540.2
80	3.0000	.45000	.41.000	.1350-01	.1100-01	.1530-01	.2064-03	.1682-03	.2329-03	.1050	1.219	539.8
80	3.0000	.47500	.42.000	.1010-01	.8200-02	.1140-01	.1533-03	.1249-03	.1730-03	.7900-01	.8820	540.2
80	3.0000	.50000	.43.000	.9500-02	.7700-02	.1070-01	.1440-03	.1173-03	.1625-03	.7400-01	.8290	540.2
80	3.0000	.52500	.44.000	.7400-02	.6000-02	.8400-02	.1128-03	.9188-04	.1272-03	.5800-01	.6840	539.7
80	3.0000	.55000	.45.000	.6900-02	.5600-02	.7700-02	.1045-03	.8517-04	.1179-03	.5400-01	.6020	539.7
80	3.0000	.57500	.46.000	.4900-02	.4000-02	.5600-02	.7518-04	.6126-04	.8482-04	.3900-01	.4230	539.7
80	3.0000	.60000	.47.000	.3300-02	.2700-02	.3700-02	.5014-04	.4086-04	.5657-04	.2600-01	.2750	539.6
80	3.0000	.62500	.48.000	.2000-02	.1600-02	.2200-02	.3013-04	.2455-04	.3399-04	.1600-01	.1720	539.6
80	3.0000	.65000	.49.000	.1800-02	.1400-02	.2000-02	.2711-04	.2209-04	.3059-04	.1400-01	.1520	539.6
80	3.0000	.67500	.50.000	.2100-02	.1700-02	.2300-02	.3171-04	.2583-04	.3578-04	.1600-01	.1760	540.0
80	3.0000	.70000	.51.000	.1000-03	.1000-03	.1000-03	.1637-05	.1512-05	.2096-05	.1000-02	.1200-01	541.5
80	3.0000	.72500	.52.000	.6000-03	.5000-03	.7000-03	.9338-05	.7603-05	.1054-04	.5000-02	.6700-01	541.7
80	3.0000	.75000	.53.000	.5000-03	.4000-03	.5000-03	.6991-05	.5692-05	.7891-05	.4000-02	.4700-01	541.6
80	4.0000	.20700	.71.000	.3480-01	.2830-01	.3940-01	.5310-03	.4315-03	.6002-03	.2700	3.081	547.0
80	4.0000	.22500	.72.000	.2800-01	.2280-01	.3170-01	.4273-03	.3475-03	.4827-03	.2180	2.559	544.7
80	4.0000	.25000	.73.000	.2430-01	.1980-01	.2750-01	.3705-03	.3014-03	.4184-03	.1900	2.225	543.7
80	4.0000	.27500	.74.000	.2550-01	.2070-01	.2680-01	.3882-03	.3159-03	.4383-03	.1990	2.465	542.9
80	4.0000	.30000	.75.000	.2640-01	.2150-01	.2980-01	.4019-03	.3272-03	.4537-03	.2070	2.710	541.8
80	4.0000	.32500	.76.000	.2140-01	.1740-01	.2410-01	.3256-03	.2652-03	.3675-03	.1680	2.199	541.1
80	4.0000	.35000	.77.000	.1640-01	.1330-01	.1850-01	.2492-03	.2029-03	.2812-03	.1280	1.684	540.8
80	4.0000	.37500	.78.000	.1310-01	.1070-01	.1480-01	.1993-03	.1624-03	.2250-03	.1030	1.349	540.4
80	4.0000	.40000	.79.000	.9800-02	.8000-02	.1100-01	.1490-03	.1214-03	.1682-03	.7700-01	1.008	540.3
80	4.0000	.42500	.80.000	.7400-02	.6000-02	.8300-02	.1120-03	.9128-04	.1269-03	.5800-01	.7590	540.0
80	4.0000	.45000	.81.000	.6000-02	.4900-02	.6800-02	.9136-04	.7444-04	.1031-03	.4700-01	.6120	539.8
80	4.0000	.47500	.82.000	.4800-02	.3900-02	.5400-02	.7328-04	.5971-04	.8268-04	.3800-01	.4830	539.6

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 159

OH-74 (AEDC V41B-88A) B62C12F10M16M127E52V8R19

(RV8002)

RUN NUMBER	TRAVE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H(9T0) BTU/ R FT2SEC	H(10T) BTU/ R FT2SEC	H(1TA) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TH DEG. R
80	4.0000	.50000	64.000	.3700-02	.3000-02	.4100-02	.5604-04	.4967-04	.6323-04	.2900-01	.3590	539.5
80	4.0000	.52500	65.000	.3300-02	.2700-02	.3700-02	.4957-04	.4039-04	.5592-04	.2600-01	.3170	539.6
80	4.0000	.55000	66.000	.3300-02	.2700-02	.3700-02	.4963-04	.4044-04	.5600-04	.2600-01	.3010	539.8
80	4.0000	.60000	67.000	.1900-02	.1500-02	.2100-02	.2872-04	.2340-04	.3240-04	.1500-01	.1670	539.5
80	4.0000	.65000	68.000	.1000-02	.8000-03	.1100-02	.1478-04	.1204-04	.1668-04	.8000-02	.9000-01	540.0
80	4.0000	.70000	69.000	.1100-02	.9000-03	.1200-02	.1640-04	.1336-04	.1851-04	.8000-02	.9400-01	540.8
80	4.0000	.75000	70.000	.9000-03	.1000-02	.1000-02	.1414-04	.1152-04	.1595-04	.7000-02	.8100-01	540.1
80	4.0000	.80000	75.000	.2000-03	.2000-03	.2000-03	.3324-05	.2708-05	.3751-05	.2000-02	.2100-01	541.6
80	4.0000	.87500	77.000	.0000	.0000	.1000-03	.7287-05	.5937-06	.8221-06	.0000	.5000-02	541.0
80	4.0000	.92500	79.000	-.1500-02	-.1200-02	-.1700-02	-.2336-04	-.1903-04	-.2636-04	-.1200-01	-.1500	541.3
80	4.0000	.95000	80.000	.8000-03	.7000-03	.9000-03	.1216-04	.9904-05	.1372-04	.0000	.0000	583.2

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITTER FUSELAOE PORT SIDE

PAGE 160

OH-74 (AEDC V418-B8A) 862C12F10H16H127E52V8R19

(RV8002)

ORBITTER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
34	7.960	29.83	299.8	1269.	-90.00	1.000	92.80	.3200-01	1.407	3758.	.2868-04	.7473-07

RUN NUMBER	RN/L	HREF BTU/ R FT ² SEC	STN NO R= .0175
34	1.442	.2901-01	.3372-01

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H/90° BTU/ FT ² SEC	I (TO) BTU/ R FT ² SEC	H (TAN) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTMDT DEG. R /SEC	TW DEG. R
34	1.0000	.27500	1.0000	.1580-01	.1300-01	.1770-01	.45E 3	.3781-03	.5121-03	.2750	2.855	541.4
34	1.0000	.30000	2.0000	.1290-01	.1070-01	.1450-01	.3755 3	.3100-03	.4198-03	.2260	2.398	540.9
34	1.0000	.32500	3.0000	.1190-01	.9800-02	.1370-01	.3452-03	.2851-03	.3859-03	.2080	2.137	540.3
34	1.0000	.35000	4.0000	.1210-01	.1000-01	.1350-01	.3497-03	.2888-03	.3909-03	.2100	2.184	540.4
34	1.0000	.37500	5.0000	.1150-01	.9500-02	.1260-01	.3331-03	.2751-03	.3724-03	.2000	2.109	540.7
34	1.0000	.40000	6.0000	.1860-01	.1540-01	.2050-01	.5406-03	.4463-03	.6044-03	.3250	3.338	541.4
34	1.0000	.42500	7.0000	.2010-01	.1660-01	.2240-01	.5821-03	.4805-03	.6510-03	.3490	3.620	542.4
34	1.0000	.45000	8.0000	.2390-01	.1980-01	.2680-01	.6944-03	.5731-03	.7765-03	.4170	4.261	542.2
34	1.0000	.47500	9.0000	.2190-01	.1800-01	.2440-01	.6341-03	.5233-03	.7091-03	.3800	3.869	542.7
34	1.0000	.50000	10.000	.3140-01	.2590-01	.3520-01	.9122-03	.7527-03	.1020-02	.5460	5.532	543.5
34	1.0000	.52500	11.000	.3820-01	.3150-01	.4280-01	.1109-02	.9146-03	.1241-02	.6620	6.706	544.7
34	1.0000	.55000	12.000	.3530-01	.2910-01	.3950-01	.1023-02	.8444-03	.1145-02	.6120	6.147	543.7
34	1.0000	.60000	13.000	.2570-01	.2120-01	.2870-01	.7445-03	.6144-03	.8327-03	.4460	4.520	542.9
34	1.0000	.65000	14.000	.1970-01	.1630-01	.2200-01	.5714-03	.4717-03	.6389-03	.3430	3.476	541.9
34	1.0000	.70000	15.000	.1490-01	.1230-01	.1670-01	.4325-03	.3571-03	.4836-03	.2600	2.541	541.5
34	1.0000	.75000	16.000	.1000-01	.8300-02	.1120-01	.2906-03	.2400-03	.3249-03	.1750	1.771	541.3
34	1.0000	.80000	17.000	.5103-02	.4200-02	.5700-02	.1469-03	.1213-03	.1642-03	.8800-01	.8570	540.7
34	1.0000	.85000	18.000	.1650-01	.1360-01	.1840-01	.4780-03	.3946-03	.5315-03	.2870	3.371	541.4
34	2.0000	.28500	18.000	.1430-01	.1180-01	.1600-01	.4162-03	.3436-03	.4653-03	.2500	2.954	540.9
34	2.0000	.33700	19.000	.2840-01	.2340-01	.3180-01	.8241-03	.6801-03	.9217-03	.4940	5.825	542.8
34	2.0000	.39000	20.000	.2840-01	.2340-01	.3180-01	.8241-03	.6801-03	.9217-03	.4940	5.825	542.8
34	2.0000	.42600	21.000	.3570-01	.2940-01	.3990-01	.1035-02	.8536-03	.1150-02	.6180	7.244	544.9
34	2.0000	.47800	22.000	.4880-01	.4030-01	.5460-01	.1416-02	.1168-02	.1585-02	.8450	9.405	545.5

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75 OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V418-B8A) B62C12F10H16H127E32V8R19

RUN NUMBER	TRAJ E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(IST) BTU/ R FT2SEC	H(ITO) BTU/ R FT2SEC	H(ITH) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTMOT DEG. R /SEC	TM DEG. R
34	2.0000	.53000	23.000	.2380-01	.1960-01	.2660-01	.6894-03	.5689-03	.7710-03	.4130	4.604	542.9
34	2.0000	.56700	24.000	.1760-01	.1450-01	.1970-01	.5113-03	.4221-03	.5717-03	.3070	3.340	541.7
34	2.1000	.62000	25.000	.1190-01	.9800-02	.1330-01	.3444-03	.2844-03	.3951-03	.2070	2.255	540.8
34	2.3000	.67000	26.000	.8100-02	.6700-02	.9100-02	.2353-03	.1943-03	.2630-03	.1410	1.540	540.7
34	2.0000	.70500	27.000	.7200-02	.6000-02	.8100-02	.2091-03	.1727-03	.2337-03	.1260	1.358	539.9
34	2.0000	.75000	28.000	.5800-02	.4800-02	.6400-02	.1674-03	.1383-03	.1871-03	.1010	1.111	539.1
34	2.0000	.80000	29.000	.4000-03	.3000-03	.4000-03	.1049-04	.8665-05	.1172-04	.6000-02	.7000-01	539.0
34	3.0000	.20000	31.000	.3250-01	.2680-01	.3640-01	.9430-03	.7771-03	.1056-02	.5600	5.933	547.9
34	3.0000	.22500	32.000	.2800-01	.2310-01	.3130-01	.6112-03	.6689-03	.9079-03	.4830	5.407	546.1
34	3.0000	.25000	33.000	.2140-01	.1770-01	.2400-01	.6219-03	.5131-03	.6956-03	.3720	4.170	543.3
34	3.0000	.27500	34.000	.1720-01	.1420-01	.1920-01	.4982-03	.4112-03	.5570-03	.2990	3.587	541.7
34	3.0000	.30000	35.000	.1500-01	.1240-01	.1680-01	.4355-03	.3596-03	.4869-03	.2620	3.247	540.7
34	3.0000	.32500	36.000	.1580-01	.1300-01	.1760-01	.4571-03	.3775-03	.5110-03	.2750	3.231	540.4
34	3.0000	.35000	37.000	.2520-01	.2080-01	.2820-01	.7320-03	.6043-03	.8185-03	.4400	5.107	541.6
34	3.0000	.37500	38.000	.3820-01	.3150-01	.4280-01	.1109-02	.9151-03	.1241-02	.6640	7.783	543.8
34	3.0000	.40000	39.000	.3730-01	.3080-01	.4170-01	.1082-02	.8930-03	.1211-02	.6480	7.633	543.9
34	3.0000	.42500	40.000	.3490-01	.2880-01	.3630-01	.9409-03	.7765-03	.1052-02	.6050	7.163	544.4
34	3.0000	.45000	41.000	.3240-01	.2680-01	.3630-01	.6737-03	.5561-03	.7532-03	.4050	4.513	541.5
34	3.0000	.47500	42.000	.2320-01	.1920-01	.2600-01	.5348-03	.4415-03	.5980-03	.3210	3.583	541.5
34	3.0000	.50000	43.000	.1840-01	.1520-01	.2060-01	.3547-03	.2929-03	.3965-03	.2130	2.508	540.2
34	3.0000	.52500	44.000	.1220-01	.1010-01	.1370-01	.2997-03	.2476-03	.3350-03	.1810	2.015	539.9
34	3.0000	.55000	45.000	.1030-01	.8500-02	.1150-01	.2215-03	.1830-03	.2476-03	.1330	1.454	539.5
34	3.0000	.60000	46.000	.7600-02	.6300-02	.8500-02	.2215-03	.1830-03	.1795-03	.9700-01	1.030	539.0
34	3.0000	.65000	47.000	.5500-02	.4600-02	.6200-02	.1607-03	.1327-03	.1196-03	.5500-01	.7140	539.0
34	3.0000	.70000	48.000	.3700-02	.3000-02	.4100-02	.1070-03	.8839-04	.5302-04	.2900-01	.3120	538.5
34	3.0000	.75000	49.000	.1600-02	.1400-02	.1800-02	.4745-04	.3921-04	.2298-04	.1200-01	.1330	538.7
34	3.0000	.80000	50.000	.7000-03	.6000-03	.8000-03	.2056-04	.1699-04	.4760-05	.3000-02	.3200-01	539.9
34	3.0000	.85000	51.000	.1000-03	.1000-03	.2000-03	.4259-05	.3517-05	.4134-04	.2200-01	.2760	540.5
34	3.0000	.87500	52.000	.1300-02	.1100-02	.1400-02	.3698-04	.3054-04	.3876-04	.2100-01	.2900	541.2
34	3.0000	.90000	53.000	.1200-02	.1000-02	.1300-02	.3467-04	.2862-04	.2483-04	.1300-01	.1750	541.3
34	3.0000	.92500	54.000	.8000-03	.6000-03	.9000-03	.2221-04	.1833-04	.2097-04	.1100-01	.1150	540.4
34	3.0000	.95000	55.000	.6000-03	.5000-03	.7000-03	.1108-02	.9120-03	.9334-03	.5060	5.924	547.7
34	4.0000	.20000	71.000	.3820-01	.3140-01	.4280-01	.8516-03	.7018-03	.1242-02	.6540	7.443	551.9
34	4.0000	.22500	72.000	.2940-01	.2420-01	.3290-01	.6712-03	.5536-03	.7511-03	.4010	4.695	545.2
34	4.0000	.25000	73.000	.2310-01	.1910-01	.2590-01	.6226-03	.5136-03	.6964-03	.3720	4.611	543.8
34	4.0000	.27500	74.000	.2150-01	.1770-01	.2400-01	.6652-03	.5490-03	.7440-03	.3990	5.228	542.8
34	4.0000	.30000	75.000	.3840-01	.3170-01	.4290-01	.1113-02	.9182-03	.1216-02	.6650	8.704	545.2
34	4.0000	.32500	76.000	.4210-01	.3470-01	.4710-01	.1220-02	.1006-02	.1366-02	.7270	9.517	546.2
34	4.0000	.35000	77.000	.2640-01	.2180-01	.2960-01	.7670-03	.6330-03	.8579-03	.4600	6.029	542.7
34	4.0000	.37500	78.000	.1770-01	.1460-01	.1980-01	.5121-03	.4231-03	.6579-03	.3080	4.041	541.2
34	4.0000	.40000	80.000	.1270-01	.1050-01	.1420-01	.3677-03	.3037-03	.4111-03	.2210	2.905	540.5
34	4.0000	.42500	81.000	.9100-02	.7500-02	.1010-01	.2626-03	.2169-03	.2935-03	.1580	2.053	539.8

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 162

OH-74 (AEDC V41B-B8A) 862C12F10M16M127E5EVR19

(RV8002)

RUN NUMBER	TRAJ'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T0 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAN1 BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DT/DT DEG. R /SEC	TH DEG. R
34	4.0000	.47500	63.000	.7000-02	.5800-02	.7900-02	.2038-03	.1683-03	.2278-03	.1230	1.567	539.6
34	4.0000	.50000	64.000	.5900-02	.4900-02	.6600-02	.1714-03	.1416-03	.1915-03	.1030	1.263	538.9
34	4.0000	.52500	65.000	.4900-02	.4100-02	.5500-02	.1427-03	.1179-03	.1595-03	.8600-01	1.069	538.7
34	4.0000	.55000	66.000	.4200-02	.3500-02	.4700-02	.1228-03	.1014-03	.1372-03	.7400-01	.8710	538.8
34	4.0000	.60000	67.000	.3100-02	.2600-02	.3500-02	.8966-04	.7409-04	.1002-03	.9400-01	.6110	538.0
34	4.0000	.65000	68.000	.2300-02	.1900-02	.2600-02	.6726-04	.5558-04	.7515-04	.4100-01	.4780	538.0
34	4.0000	.70000	69.000	.1400-02	.1100-02	.1500-02	.3938-04	.3254-04	.4401-04	.2400-01	.2660	538.2
34	4.0000	.75000	70.000	.1100-02	.9000-03	.1200-02	.3244-04	.2681-04	.3625-04	.2000-01	.2190	537.9
34	4.0000	.80000	75.000	.6000-03	.5000-03	.7000-03	.1810-04	.1496-04	.2023-04	.1100-01	.1320	538.4
34	4.0000	.87500	77.000	.7000-03	.5000-03	.7000-03	.1894-04	.1565-04	.2116-04	.1100-01	.1500	538.5
34	4.0000	.90000	78.000	.8000-03	.6000-03	.9000-03	.2280-04	.1884-04	.2548-04	.1400-01	.1790	538.9
34	4.0000	.92500	79.000	.4800-02	.4000-02	.5400-02	.1402-03	.1158-03	.1567-03	.8400-01	1.047	539.8
34	4.0000	.95000	80.000	.9000-03	.7000-03	.1000-02	.2599-04	.2147-04	.2904-04	.0000	.0000	583.3

DATE 07 OCT 75

OH-7A (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 153

OH-7A (AEDC V41B-B8A) B62C12F10H16H127E32V8R19

(RV8002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
35	7.960	34.83	298.2	1269.	168.8	1.000	92.80	.3200-01	1.400	3758.	.2852-04	.7473-07

RUN NUMBER	RN/L X10 5 /FT	HREF BTU/ R FT2SEC /FT	STN NO R= .0175 .3381-01
35	1.434	.2893-01	.3381-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(1AH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
35	1.0000	.27500	1.0000	.1540-01	.1270-01	.1730-01	.4465-03	.3687-03	.4993-03	.2680	2.783	541.4
35	1.0000	.30000	2.0000	.1330-01	.1100-01	.1490-01	.3852-03	.3180-03	.4306-03	.2320	2.460	541.1
35	1.0000	.32500	3.0000	.1180-01	.9800-02	.1320-01	.3426-03	.2829-03	.3829-03	.2060	2.121	540.1
35	1.0000	.35000	4.0000	.1310-01	.1080-01	.1460-01	.3779-03	.3121-03	.4225-03	.2270	2.362	540.1
35	1.0000	.37500	5.0000	.1700-01	.1400-01	.1900-01	.4918-03	.4061-03	.5499-03	.2960	3.110	541.1
35	1.0000	.40000	6.0000	.2310-01	.1910-01	.2580-01	.6680-03	.5515-03	.7468-03	.4020	4.129	541.0
35	1.0000	.42500	7.0000	.2030-01	.1670-01	.2260-01	.5867-03	.4837-03	.6552-03	.3520	3.650	541.6
35	1.0000	.45000	8.0000	.2110-01	.1740-01	.2360-01	.6106-03	.5041-03	.6826-03	.3570	3.756	541.1
35	1.0000	.47500	9.0000	.3250-01	.2680-01	.3630-01	.9392-03	.7752-03	.1050-02	.5630	5.732	542.6
35	1.0000	.50000	10.000	.2400-01	.1980-01	.2690-01	.6950-03	.5739-03	.7771-03	.4180	4.235	541.3
35	1.0000	.52500	11.000	.2860-01	.2360-01	.3200-01	.8273-03	.6830-03	.9251-03	.4970	5.037	541.6
35	1.0000	.55000	12.000	.2940-01	.2430-01	.3290-01	.8514-03	.7028-03	.9520-03	.5110	5.137	541.6
35	1.0000	.60000	13.000	.2040-01	.1680-01	.2280-01	.5905-03	.4875-03	.6602-03	.3550	3.596	541.4
35	1.0000	.65000	14.000	.2050-01	.1690-01	.2290-01	.5933-03	.4899-03	.6633-03	.3570	3.616	541.1
35	1.0000	.70000	15.000	.1280-01	.1050-01	.1430-01	.3694-03	.3051-03	.4129-03	.2220	2.178	539.8
35	1.0000	.75000	16.000	.7000-02	.5700-02	.7800-02	.2014-03	.1663-03	.2251-03	.1210	1.232	539.5
35	1.0000	.80000	17.000	.1600-02	.1300-02	.1800-02	.4657-04	.3848-04	.5204-04	.2800-01	.2730	538.8
35	1.0000	.85000	18.000	.1680-01	.1380-01	.1870-01	.4850-03	.4003-03	.5474-03	.2910	3.414	542.3
35	2.0000	.28500	19.000	.1590-01	.1310-01	.1770-01	.4589-03	.3788-03	.5131-03	.2760	3.252	541.7
35	2.0000	.33700	20.000	.3310-01	.2730-01	.3700-01	.9578-03	.7993-03	.1071-02	.5740	6.765	543.2
35	2.0000	.39000	21.000	.2470-01	.2040-01	.2760-01	.7137-03	.5890-03	.7981-03	.4280	5.020	542.6
35	2.0000	.42600	22.000	.2410-01	.1990-01	.2690-01	.6972-03	.5755-03	.7795-03	.4190	4.669	541.6

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 154

(RV8002)

DATE 07 OCT 75

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

04-74 (AEDC V41B-88A) B62C12F10M16M127E52V8R19

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H19T0 BTU/ R	H1T0 BTU/ R	H1TAN BTU/ R	QDOT BTU/	Q1MOT DEG. R	TH DEG. R
35	2.0000	.53000	23.000	.2250-01	.1860-01	.2520-01	.6318-03	.5781-03	.7288-03	.3920	4.367	541.4
35	2.0000	.56700	24.000	.1530-01	.1260-01	.1710-01	.4420-03	.3850-03	.4941-03	.2660	2.895	540.5
35	2.0000	.62000	25.000	.1110-01	.9200-02	.1240-01	.3213-03	.2854-03	.3591-03	.1940	2.108	539.7
35	2.0000	.67000	26.000	.6400-02	.5300-02	.7200-02	.1853-03	.1331-03	.2070-03	.1120	1.219	538.5
35	2.0000	.70500	27.000	.5200-02	.4300-02	.5800-02	.1511-03	.1249-03	.1888-03	.9100-01	.9850	538.3
35	2.0000	.75000	28.000	.2000-02	.1700-02	.2300-02	.5813-04	.4887-04	.6807-04	.3800-01	.3930	537.9
35	2.0000	.80000	29.000	.1500-02	.1200-02	.1700-02	.4330-04	.3579-04	.4839-04	.2800-01	.2890	538.1
35	2.0000	.82400	30.000	.1000-02	.8000-03	.1100-02	.2899-04	.2396-04	.3240-04	.1800-01	.2440	538.3
35	2.0000	.82400	31.000	.3300-01	.2720-01	.3690-01	.9541-03	.7865-03	.1068-02	.5680	6.019	546.7
35	3.0000	.20000	32.000	.2760-01	.2260-01	.3090-01	.7999-03	.6596-03	.8952-03	.4770	5.335	545.8
35	3.0000	.25000	33.000	.2050-01	.1730-01	.2340-01	.6050-03	.4991-03	.7668-03	.3620	4.051	544.0
35	3.0000	.27500	34.000	.1690-01	.1390-01	.1890-01	.4882-03	.4029-03	.5460-03	.2930	3.506	542.9
35	3.0000	.30000	35.000	.2050-01	.1690-01	.2300-01	.5939-03	.3456-03	.4695-03	.2520	3.123	541.8
35	3.0000	.32500	36.000	.3400-01	.2810-01	.3800-01	.9840-03	.4902-03	.6641-03	.3560	6.837	543.5
35	3.0000	.37500	37.000	.3510-01	.2900-01	.3930-01	.1017-02	.8119-03	.1101-02	.5890	7.135	543.8
35	3.0000	.40000	38.000	.2010-01	.1660-01	.2250-01	.5813-03	.4800-03	.6499-03	.3490	4.126	540.9
35	3.0000	.42500	39.000	.2970-01	.2450-01	.3320-01	.8595-03	.5194-03	.9613-03	.5150	6.104	543.1
35	3.0000	.45000	40.000	.2170-01	.1800-01	.2430-01	.6290-03	.4503-03	.7092-03	.3780	4.326	541.1
35	3.0000	.47500	41.000	.1890-01	.1560-01	.2110-01	.5454-03	.3527-03	.6098-03	.3280	3.556	541.1
35	3.0000	.50000	42.000	.1480-01	.1220-01	.1650-01	.3118-03	.2576-03	.4774-03	.2570	2.867	540.5
35	3.0000	.52500	43.000	.1080-01	.8900-02	.1200-01	.1819-03	.1503-03	.3465-03	.1880	2.210	539.2
35	3.0000	.55000	44.000	.9200-02	.7600-02	.1030-01	.2674-03	.2209-03	.2989-03	.1610	1.801	539.2
35	3.0000	.60000	45.000	.6200-02	.5200-02	.7000-02	.1327-03	.1096-03	.2033-03	.1100	1.197	538.3
35	3.0000	.65000	46.000	.2300-02	.1900-02	.2600-02	.6784-04	.5607-04	.1482-03	.8000-01	.8520	538.1
35	3.0000	.70000	47.000	.9000-03	.7000-03	.1000-02	.2520-04	.2083-04	.2816-04	.4100-01	.4540	537.6
35	3.0000	.75000	48.000	.4000-03	.4000-03	.5000-03	.1269-04	.1048-04	.7579-04	.1500-01	.1660	537.6
35	3.0000	.80000	49.000	.8000-03	.4000-03	.9000-03	.2308-04	.1907-04	.1417-04	.8000-02	.8200-01	537.9
35	3.0000	.85000	50.000	.1500-02	.1200-02	.1600-02	.4199-04	.3469-04	.2579-04	.1400-01	.1730	538.8
35	3.0000	.87500	51.000	.1700-02	.1400-02	.1800-02	.4788-04	.3954-04	.4693-04	.2500-01	.3140	539.3
35	3.0000	.90000	52.000	.1100-02	.9000-03	.1200-02	.3046-04	.2516-04	.5350-04	.2900-01	.4020	539.6
35	3.0000	.92500	53.000	.1600-02	.1300-02	.1800-02	.4708-04	.3889-04	.3405-04	.1800-01	.2410	539.5
35	3.0000	.95000	54.000	.3650-01	.3040-01	.4140-01	.1069-02	.8801-03	.5262-04	.2800-01	.2880	539.2
35	4.0000	.20000	71.000	.2860-01	.2350-01	.3200-01	.8262-03	.6810-03	.1197-02	.6330	7.213	549.6
35	4.0000	.22500	72.000	.2290-01	.1890-01	.2570-01	.6639-03	.5475-03	.9247-03	.4920	5.757	546.9
35	4.0000	.25000	73.000	.2490-01	.2040-01	.2770-01	.7168-03	.5912-03	.7428-03	.3960	4.647	544.8
35	4.0000	.27500	74.000	.2580-01	.2130-01	.2890-01	.7468-03	.6160-03	.8020-03	.3280	5.298	544.7
35	4.0000	.30000	75.000	.3490-01	.2880-01	.3910-01	.1011-02	.8333-03	.8394-03	.4460	5.850	544.3
35	4.0000	.32500	76.000	.2400-01	.1980-01	.2690-01	.6949-03	.5734-03	.1131-02	.6030	7.892	545.7
35	4.0000	.35000	77.000	.1920-01	.1590-01	.2150-01	.5561-03	.4591-03	.7772-03	.4160	5.456	543.2
35	4.0000	.37500	78.000	.1460-01	.1210-01	.1630-01	.4227-03	.3490-03	.6218-03	.3340	4.382	541.5
35	4.0000	.40000	79.000	.9800-02	.8100-02	.1100-01	.2839-03	.2345-03	.4725-03	.2540	3.336	540.8
35	4.0000	.42500	80.000						.3173-03	.1710	2.246	539.6

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 185

OH-74 (AEDC V41B-88A) B62C12F10M16M127E52V0819

(RV8002)

RUN NUMBER	TRA E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
35	4.0000	.45000	62.000	.7400-02	.6100-02	.8300-02	.2149-03	.1776-03	.2402-03	.1300	1.683	539.1
35	4.0000	.47500	63.000	.5800-02	.4800-02	.6400-02	.1665-03	.1376-03	.1861-03	.1000+00	1.283	538.7
35	4.0000	.50000	64.000	.4800-02	.4000-02	.5400-02	.1400-03	.1157-03	.1584-03	.8500-01	1.049	538.1
35	4.0000	.52500	65.000	.4000-02	.3300-02	.4500-02	.1161-03	.9592-04	.1297-03	.7000-01	.8700	538.5
35	4.0000	.55000	66.000	.3400-02	.2800-02	.3800-02	.9964-04	.8234-04	.1113-03	.6000-01	.7080	538.1
35	4.0000	.60000	67.000	.2200-02	.1800-02	.2500-02	.6444-04	.5327-04	.7200-04	.3900-01	.4400	537.4
35	4.0000	.65000	68.000	.8000-03	.5000-03	.6000-03	.1637-04	.1353-04	.1828-04	.1000-01	.1160	537.5
35	4.0000	.70000	69.000	.8000-03	.7000-03	.9000-03	.2351-04	.1943-04	.2627-04	.1400-01	.1590	537.8
35	4.0000	.75000	70.000	.9000-03	.7000-03	.1000-02	.2512-04	.2076-04	.2807-04	.1500-01	.1700	537.6
35	4.0000	.80000	71.000	.9000-03	.4000-03	.5000-03	.1326-04	.1095-04	.1481-04	.8000-02	.9700-01	538.8
35	4.0000	.85000	76.000	.6000-03	.5000-03	.7000-03	.1841-04	.1522-04	.2057-04	.1100-01	.1320	537.6
35	4.0000	.87500	77.000	.5000-03	.4000-03	.6000-03	.1518-04	.1254-04	.1696-04	.9000-02	.1200	538.4
35	4.0000	.90000	78.000	.6000-03	.5000-03	.7000-03	.1771-04	.1463-04	.1979-04	.1100-01	.1390	538.8
35	4.0000	.92500	79.000	.2100-02	.1800-02	.2400-02	.6153-04	.5084-04	.6876-04	.3700-01	.4610	538.8
35	4.0000	.95000	80.000	.2000-02	.1600-02	.2200-02	.5730-04	.4733-04	.6404-04	.3500-01	.4060	539.6

CH-74 (AEDC V418-B8A) B82C12F10H16W127E52V8R19

(RVB002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
36	7.960	39.92	300.6	1269.	174.4	1.000	92.60	.3200-01	1.411	3759.	.2875-.04	.7473-.07
RUN NUMBER	RM/L X10 6	WREF BTU/ R	STN NO R=									
35	1.446	.2905-01	.0175	.3367-01								

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	M/HREF R=0.9	M/HREF R=1.0	M/HREF R=TAN	H19T0 BTU/ R F12SEC	H1T0 BTU/ R F12SEC	M1TAM BTU/ R F12SEC	QDOT BTU/ F12SEC	DTHOT DEG. R /SEC	TM DEG. R
35	1.0000	.27500	1.0000	.1600-01	.1320-01	.1790-01	.4644-03	.3835-03	.5192-03	.2790	2.900	540.5
35	1.0000	.30000	2.0000	.1350-01	.1120-01	.1510-01	.3924-03	.3241-03	.4386-03	.2360	2.511	540.2
35	1.0000	.32500	3.0000	.1200-01	.9900-02	.1340-01	.3489-03	.2682-03	.3900-03	.2100	2.163	539.7
35	1.0000	.35000	4.0000	.1760-01	.1450-01	.1960-01	.5106-03	.4217-03	.5707-03	.3070	3.193	539.9
35	1.0000	.37500	5.0000	.1990-01	.1650-01	.2230-01	.5793-03	.4784-03	.6477-03	.3480	3.666	540.9
35	1.0000	.40000	6.0000	.2050-01	.1690-01	.2290-01	.5959-03	.4921-03	.6662-03	.3580	3.687	540.6
35	1.0000	.42500	7.0000	.1740-01	.1440-01	.1950-01	.5067-03	.4184-03	.5664-03	.3050	3.164	540.5
35	1.0000	.45000	8.0000	.3070-01	.2540-01	.3430-01	.6920-03	.7364-03	.9973-03	.5360	5.485	541.2
35	1.0000	.47500	9.0000	.2280-01	.1880-01	.2550-01	.6630-03	.5474-03	.7412-03	.3980	4.059	541.2
35	1.0000	.50000	10.0000	.3040-01	.2040-01	.2760-01	.7184-03	.5937-03	.8031-03	.4320	4.384	540.6
35	1.0000	.52500	11.0000	.2460-01	.2510-01	.3400-01	.8829-03	.7289-03	.9872-03	.5300	5.378	541.4
35	1.0000	.55000	12.0000	.2460-01	.2030-01	.2750-01	.7153-03	.5907-03	.7997-03	.4300	4.326	540.6
35	1.0000	.60001	13.0000	.2120-01	.1750-01	.2370-01	.6145-03	.5073-03	.6871-03	.3690	3.743	541.4
35	1.0000	.65000	14.0000	.1350-01	.1110-01	.1510-01	.3921-03	.3238-03	.4382-03	.2360	2.396	540.0
35	1.0000	.70000	15.0000	.4300-02	.3600-02	.4800-02	.1257-03	.1039-03	.1405-03	.7600-01	7430	539.0
35	1.0000	.75000	16.0000	.7000-03	.6000-03	.8000-03	.2129-04	.1759-04	.2379-04	.1300-01	1300	538.6
35	1.0000	.80000	17.0000	.1800-02	.1500-02	.2000-02	.5529-04	.4321-04	.5643-04	.3200-01	3070	538.4
35	1.0000	.85000	18.0000	.1560-01	.1290-01	.1750-01	.4546-03	.3754-03	.5072-03	.2730	3.211	540.7
35	2.0000	.83700	19.0000	.2010-01	.1660-01	.2250-01	.5839-03	.4822-03	.6526-03	.3510	4.148	540.5
35	2.0000	.39000	20.0000	.2220-01	.1830-01	.2480-01	.6436-03	.5315-03	.7195-03	.3870	4.571	540.6
35	2.0000	.42600	21.0000	.3570-01	.2940-01	.3990-01	.1037-02	.8554-03	.1159-02	.6210	7.288	542.9
35	2.0000	.47800	22.0000	.2640-01	.2180-01	.2950-01	.7669-03	.6333-03	.9574-03	.4610	5.144	540.9

DATE 07 OCT 75

OH-7A (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 167

OH-7A (AEDC V41B-BBA) B62C12F10H16H127E52VBR19

(RVB002)

RUN NUMBER	TRAJE	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H19101 BTU/ R F12SEC	H10101 BTU/ R F12SEC	H1TAM1 BTU/ R F12SEC	QDOT BTU/ R F12SEC	DTMDT DEG. R /SEC	TM DEG. R
35	2.0000	.53000	23.000	.1940-01	.1600-01	.2160-01	.5623-03	.4643-03	.6286-03	.3390	3.772	940.8
36	2.0000	.56700	24.000	.1330-01	.1100-01	.1490-01	.3862-03	.3190-03	.4316-03	.2330	2.535	539.4
36	2.0000	.62000	25.000	.8700-02	.7200-02	.9700-02	.2521-03	.2083-03	.2817-03	.1920	1.956	539.0
36	2.0000	.67000	26.000	.5100-02	.4200-02	.5700-02	.1477-03	.1221-03	.1651-03	.8900-01	.9720	538.5
36	2.0000	.70500	27.000	.1730-02	.1400-02	.1900-02	.5029-04	.4157-04	.5619-04	.3000-01	.3280	537.5
36	2.0000	.75000	28.000	.2100-02	.1800-02	.2400-02	.6185-04	.5112-04	.6909-04	.3700-01	.4120	537.2
36	2.0000	.80000	29.000	.1700-02	.1400-02	.1900-02	.5062-04	.4184-04	.5656-04	.3100-01	.3390	537.8
36	2.0000	.82400	30.000	.6000-03	.5000-03	.7000-03	.1714-04	.1416-04	.1915-04	.1000-01	.1450	537.8
36	2.0000	.82400	31.000	.3270-01	.2700-01	.3660-01	.9503-03	.7835-03	.1084-02	.5660	6.003	546.0
36	3.0000	.20000	32.000	.2730-01	.2250-01	.3060-01	.7934-03	.6544-03	.8876-03	.4740	5.305	544.6
36	3.0000	.22500	33.000	.2160-01	.1780-01	.2410-01	.6269-03	.5174-03	.7011-03	.3760	4.213	542.4
36	3.0000	.25000	34.000	.1640-01	.1350-01	.1830-01	.4764-03	.3933-03	.5326-03	.2860	3.435	541.0
36	3.0000	.27500	35.000	.1630-01	.1350-01	.1820-01	.4733-03	.3908-03	.5290-03	.2850	3.532	540.2
36	3.0000	.30000	36.000	.2820-01	.2330-01	.3160-01	.8203-03	.6773-03	.9172-03	.4930	5.788	541.2
36	3.0000	.32500	37.000	.3140-01	.2600-01	.3520-01	.9135-03	.7541-03	.1021-02	.5490	6.374	541.5
36	3.0000	.35000	38.000	.2340-01	.1940-01	.2620-01	.6807-03	.5621-03	.7609-03	.4020	4.810	540.5
36	3.0000	.37500	39.000	.2490-01	.2060-01	.2780-01	.7236-03	.5976-03	.8089-03	.4350	5.144	540.2
36	3.0000	.40000	40.000	.2560-01	.2110-01	.2860-01	.7441-03	.6144-03	.8319-03	.4470	5.308	541.0
36	3.0000	.42500	41.000	.1990-01	.1640-01	.2220-01	.5781-03	.4775-03	.6461-03	.3480	3.986	539.9
36	3.0000	.45000	42.000	.1710-01	.1410-01	.1910-01	.4962-03	.4098-03	.5546-03	.2990	3.336	539.8
36	3.0000	.47500	43.000	.1310-01	.1080-01	.1470-01	.3810-03	.3148-03	.4258-03	.2300	2.566	539.0
36	3.0000	.50000	44.000	.8500-02	.7000-02	.9500-02	.2466-03	.2038-03	.2755-03	.1490	1.752	539.2
36	3.0000	.52500	45.000	.7400-02	.6100-02	.8300-02	.2146-03	.1773-03	.2328-03	.1300	1.449	537.9
36	3.0000	.55000	46.000	.4600-02	.4000-02	.5400-02	.1400-03	.1158-03	.1585-03	.8500-01	.9230	537.5
36	3.0000	.57500	47.000	.2100-02	.1700-02	.2300-02	.5986-04	.4949-04	.6688-04	.3600-01	.3860	537.0
36	3.0000	.60000	48.000	.1200-02	.1000-02	.1400-02	.3528-04	.2917-04	.3941-04	.2100-01	.2360	536.6
36	3.0000	.62500	49.000	.1500-02	.1300-02	.1700-02	.4452-04	.3680-04	.4974-04	.2700-01	.2940	536.9
36	3.0000	.65000	50.000	.1800-02	.1500-02	.2100-02	.5333-04	.4408-04	.5958-04	.3200-01	.3470	537.3
36	3.0000	.67500	51.000	.1100-02	.9000-03	.1300-02	.3323-04	.2746-04	.3714-04	.2000-01	.2490	538.8
36	3.0000	.70000	52.000	.1000-02	.9000-03	.1200-02	.3039-04	.2511-04	.3396-04	.1800-01	.2280	538.8
36	3.0000	.72500	53.000	.1300-02	.1000-02	.1400-02	.3662-04	.3025-04	.4093-04	.2200-01	.3080	539.1
36	3.0000	.75000	54.000	.2700-02	.2200-02	.3000-02	.7767-04	.6416-04	.8681-04	.4700-01	.6150	539.6
36	3.0000	.77500	55.000	.3900-02	.3200-02	.4300-02	.1128-03	.9315-04	.1260-03	.6800-01	.6900	539.6
36	4.0000	.20000	71.000	.3550-01	.2930-01	.3980-01	.1032-02	.8497-03	.1155-02	.6120	6.973	549.0
36	4.0000	.22500	72.000	.2770-01	.2280-01	.3090-01	.8033-03	.6624-03	.8930-03	.4790	5.612	545.8
36	4.0000	.25000	73.000	.2460-01	.2030-01	.2750-01	.7132-03	.5883-03	.7979-03	.4260	4.998	544.4
36	4.0000	.27500	74.000	.2710-01	.2230-01	.3030-01	.7862-03	.6465-03	.8795-03	.4700	5.820	544.0
36	4.0000	.30000	75.000	.2940-01	.2420-01	.3290-01	.8534-03	.7042-03	.9515-03	.5110	6.699	543.2
36	4.0000	.32500	76.000	.2760-01	.2280-01	.3090-01	.8026-03	.6624-03	.8977-03	.4810	6.310	542.6
36	4.0000	.35000	77.000	.2170-01	.1790-01	.2420-01	.6293-03	.5196-03	.7036-03	.3780	4.962	541.2
36	4.0000	.37500	78.000	.1970-01	.1630-01	.2200-01	.5720-03	.4724-03	.6395-03	.3440	4.520	540.3
36	4.0000	.40000	79.000	.1240-01	.1030-01	.1390-01	.3610-03	.2983-03	.4035-03	.2110	2.861	539.0
36	4.0000	.42500	81.000	.8100-02	.6700-02	.9100-02	.2353-03	.1944-03	.2629-03	.1420	1.867	538.4

DATE 07 OCT 75

04-74 (AEDC W418-B8A) HEATING DATA ON ORBITER FUELSAGE PORT SIDE

PAGE 168

04-74 (AEDC W418-B8A) SPECIFIC IONIZATION ENERGY

(RM8002)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(IST) BTU/R FT2SEC	H(ISO) BTU/R FT2SEC	H(TAM) BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTROT DEG. R /SEC	TM DEG. R
36	4.0000	.45000	62.000	.5600-02	.4800-02	.6400-02	.1572-03	.1382-03	.1868-03	.1010	1.313	537.6
36	4.0000	.47500	63.000	.4600-02	.3900-02	.5100-02	.1325-03	.1095-03	.1480-03	.8000-01	1.023	537.3
36	4.0000	.50000	64.000	.3500-02	.2900-02	.3900-02	.1015-03	.8393-04	.1134-03	.6100-01	.7630	537.2
36	4.0000	.52500	65.000	.2800-02	.2300-02	.3100-02	.8063-04	.6865-04	.9008-04	.4900-01	.6060	537.3
36	4.0000	.55000	66.000	.2300-02	.1900-02	.2500-02	.6613-04	.5466-04	.7387-04	.4000-01	.4710	537.0
36	4.0000	.60000	67.000	.1200-02	.1000-02	.1300-02	.3358-04	.2777-04	.3752-04	.2000-01	.2300	536.5
36	4.0000	.65000	68.000	.7000-03	.5000-03	.7000-03	.1927-04	.1593-04	.2152-04	.1200-01	.1370	536.7
36	4.0000	.70000	69.000	.1300-02	.1100-02	.1400-02	.3711-04	.3067-04	.4146-04	.2200-01	.2510	537.6
36	4.0000	.75000	70.000	.1000-02	.8000-03	.1100-02	.2896-04	.2394-04	.3235-04	.1800-01	.1960	537.3
36	4.0000	.80000	75.000	.5000-03	.4000-03	.6000-03	.1535-04	.1268-04	.1715-04	.9000-02	.1120	538.2
36	4.0000	.85000	76.000	.5000-03	.4000-03	.6000-03	.1476-04	.1220-04	.1650-04	.9000-02	.1060	538.1
36	4.0000	.87500	77.000	.3000-03	.2000-03	.3000-03	.7659-05	.6329-05	.8557-05	.5000-02	.6100-01	537.9
36	4.0000	.90000	78.000	.8000-03	.6000-03	.8000-03	.2206-04	.1823-04	.2466-04	.1300-01	.1730	538.5
36	4.0000	.92500	79.000	.1900-02	.1600-02	.2100-02	.5551-04	.4586-04	.6205-04	.3300-01	.4156	539.3
36	4.0000	.95000	80.000	.2500-02	.2000-02	.2800-02	.7202-04	.5950-04	.8049-04	.4300-01	.5110	539.0

DATE 07 OCT 75

OH-74 (AEDC V4'B-P8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 169

ORBITER FUSE, A E

OH-74 (AEDC V418-88A) B62C12F10M16W127E32V8R19

(RV8002)

PARAMETRIC DATA

BETA	=	1.000	HACH	=	8.000	ELEVON	=	.0000	RUDDER	=	.0000
------	---	-------	------	---	-------	--------	---	-------	--------	---	-------

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAH LEG.	T DEG. R	P PSIA	O PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
37	7.050	44.21	299.5	1269.	176.0	1.000	92.80	.3200-01	1.406	3758.	.2865-04	.7473-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175 .3374-01
37	1.441	.2900-01	

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/MREF R=0.9	H/MREF R=1.0	H/MREF R=TAW	H(ISTO) BTU/ R F12SEC	H(ITO) BTU/ R F12SEC	H(1TAN) BTU/ R F12SEC	QDOT BTU/ F12SEC	DTQDT DEG. R /SEC	TH DEG. R
37	1.0000	.27500	1.0000	.1590-01	.11310-01	.1770-01	.4603-03	.3801-03	.5146-03	.2770	2.871	541.0
37	1.0030	.30000	2.0000	.1350-01	.1110-01	.1510-01	.3904-03	.3224-03	.4364-03	.2350	2.491	540.8
37	1.0000	.32500	3.0000	.1270-01	.1050-01	.1420-01	.3687-03	.3045-03	.4122-03	.2220	2.282	540.3
37	1.0000	.35000	4.0000	.2210-01	.1820-01	.2470-01	.6397-03	.5282-03	.7153-03	.3840	3.985	541.3
37	1.0000	.37500	5.0000	.2040-01	.1690-01	.2290-01	.5926-03	.4892-03	.6627-03	.3560	3.742	541.9
37	1.0000	.40000	6.0000	.1860-01	.1530-01	.2080-01	.5383-03	.4445-03	.6018-03	.3240	3.327	541.1
37	1.0000	.42500	7.0000	.2560-01	.2120-01	.2870-01	.7432-03	.6135-03	.8310-03	.4460	4.627	541.9
37	1.0000	.45000	8.0000	.2930-01	.2410-01	.3270-01	.8482-03	.7001-03	.9484-03	.5090	5.207	542.0
37	1.0000	.47500	9.0000	.2200-01	.1820-01	.2450-01	.6379-03	.5266-03	.7133-03	.3830	3.901	541.7
37	1.0000	.50000	10.000	.2920-01	.2410-01	.3270-01	.8484-03	.6986-03	.9464-03	.5080	5.149	542.0
37	1.0000	.52500	11.000	.2850-01	.2360-01	.3190-01	.8273-03	.6829-03	.9251-03	.4960	5.033	542.0
37	1.0000	.55000	12.000	.2270-01	.1880-01	.2540-01	.6586-03	.5437-03	.7363-03	.3960	3.1975	541.4
37	1.0000	.60000	13.000	.1730-01	.1430-01	.1930-01	.5015-03	.4140-03	.5687-03	.3010	3.055	541.4
37	1.0000	.65000	14.000	.6800-02	.5700-02	.7700-02	.1985-03	.1639-03	.2219-03	.1200	1.213	539.8
37	1.0000	.70000	15.000	.1700-02	.1400-02	.1900-02	.4824-04	.3986-04	.5390-04	.2900-01	.2650	538.4
37	1.0000	.75000	16.000	.4000-02	.3300-02	.4400-02	.1152-03	.9514-04	.1287-03	.6900-01	.7050	539.0
37	1.0000	.80000	17.000	.2400-02	.2000-02	.2700-02	.6907-04	.5707-04	.7719-04	.4200-01	.4050	538.7
37	2.0000	.28500	18.000	.1670-01	.1380-01	.1870-01	.4854-03	.4008-03	.5477-03	.2920	3.424	541.4
37	2.0000	.33700	19.000	.2720-01	.2250-01	.3040-01	.7889-03	.6512-03	.8623-03	.4730	5.583	542.3
37	2.0000	.39000	20.000	.2340-01	.1930-01	.2620-01	.6784-03	.5600-03	.7585-03	.4070	4.809	541.5
37	2.0000	.42600	21.000	.3390-01	.2790-01	.3790-01	.9820-03	.8101-03	.1098-02	.5680	6.890	543.8
37	2.0000	.47800	22.000	.2630-01	.2340-01	.3160-01	.8205-03	.6773-03	.1075-03	.4920	5.491	542.0

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 170

(RV8002)

ON-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

ON-74 (AEDC V418-B8A) 862C12F10M16H127E52V8T19

DATE 07 OCT 75

RUN NUMBER	TRA'E	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R-TAN	H(9T0) BTU/ R F725C	H(70) BTU/ R F725C	H(7AM) BTU/ R F725C	QDOT BTU/ F725C	QDOT DEC. R /SEC	TN DEC. R
37	2.0000	.53000	23.000	.1500-01	.1240-01	.1670-01	.4339-03	.3983-03	.4051-03	.2610	2.911	540.9
37	2.0000	.56700	24.000	.1130-01	.9400-02	.1270-01	.3287-03	.2715-03	.3874-03	.1980	2.156	539.8
37	2.0000	.62000	25.000	.6000-02	.5000-02	.6700-02	.1738-03	.1436-03	.1942-03	.1050	1.142	539.0
37	2.0000	.67000	26.000	.4000-03	.3000-03	.5000-03	.1181-04	.9758-05	.1319-04	.7000-02	.7800-01	537.8
37	2.0000	.70500	27.000	.2100-02	.1800-02	.2400-02	.8221-04	.5142-04	.6951-04	.3800-01	.4060	537.7
37	2.0000	.75000	28.000	.3500-02	.2900-02	.3900-02	.1010-03	.8345-04	.1128-03	.8100-01	.6720	537.8
37	2.0000	.80000	29.000	.2500-02	.2100-02	.2800-02	.7194-04	.5945-04	.8038-04	.4300-01	.4810	537.8
37	2.0000	.82400	30.000	.8000-03	.7000-03	.9000-03	.2349-04	.1942-04	.2625-04	.1400-01	.1980	537.9
37	3.0000	.20000	31.000	.3250-01	.2680-01	.3640-01	.9430-03	.7773-03	.1055-02	.5610	5.948	546.7
37	3.0000	.22500	32.000	.2720-01	.2240-01	.3040-01	.7879-03	.6498-03	.8816-03	.4710	5.265	544.9
37	3.0000	.25000	33.000	.2190-01	.1810-01	.2450-01	.6346-03	.5237-03	.7097-03	.3800	4.252	543.0
37	3.0000	.27500	34.000	.1770-01	.1460-01	.1980-01	.5138-03	.4241-03	.5745-03	.3080	3.699	541.7
37	3.0000	.30000	35.000	.1980-01	.1630-01	.2210-01	.5730-03	.4730-03	.6404-03	.3440	4.269	540.9
37	3.0000	.32500	36.000	.3200-01	.2640-01	.3580-01	.9287-03	.7685-03	.1039-02	.5570	6.537	542.3
37	3.0000	.35000	37.000	.2730-01	.2250-01	.3050-01	.7904-03	.6524-03	.8838-03	.4740	5.511	541.9
37	3.0000	.37500	38.000	.2610-01	.2160-01	.2920-01	.7570-03	.6250-03	.8464-03	.4550	5.338	541.5
37	3.0000	.40000	39.000	.2680-01	.2210-01	.3000-01	.7769-03	.6414-03	.8686-03	.4670	5.510	541.2
37	3.0000	.42500	40.000	.2290-01	.1890-01	.2560-01	.6629-03	.5473-03	.7411-03	.3980	4.723	541.3
37	3.0000	.45000	41.000	.1920-01	.1580-01	.2140-01	.5556-03	.4588-03	.6211-03	.3340	3.825	540.5
37	3.0000	.47500	42.000	.1600-01	.1320-01	.1790-01	.4642-03	.3834-03	.5189-03	.2800	3.121	539.9
37	3.0000	.50000	43.000	.1060-01	.8700-02	.1180-01	.3059-03	.2527-03	.3419-03	.1840	2.059	539.3
37	3.0000	.52500	44.000	.7200-02	.5900-02	.8000-02	.2030-03	.1719-03	.2325-03	.1260	1.476	538.7
37	3.0000	.55000	45.000	.6300-02	.5200-02	.7000-02	.1822-03	.1505-03	.2036-03	.1100	1.229	538.4
37	3.0000	.60000	46.000	.3700-02	.3000-02	.4100-02	.1061-03	.8771-04	.1186-03	.6400-01	.6990	537.9
37	3.0000	.65000	47.000	.2100-02	.1700-02	.2400-02	.6121-04	.5050-04	.6838-04	.3700-01	.3940	536.9
37	3.0000	.70000	48.000	.2100-02	.1700-02	.2300-02	.5992-04	.4953-04	.6694-04	.3600-01	.4010	537.0
37	3.0000	.75000	49.000	.2800-02	.2300-02	.3200-02	.8210-04	.6786-04	.9173-04	.5000-01	.5410	537.3
37	3.0000	.80000	50.000	.1600-02	.1300-02	.1800-02	.4856-04	.3848-04	.5202-04	.2800-01	.3020	537.6
37	3.0000	.85000	51.000	.1000-02	.8000-03	.1100-02	.2808-04	.2320-04	.3138-04	.1700-01	.2100	538.7
37	3.0000	.87500	52.000	.1700-02	.1400-02	.1900-02	.4843-04	.4001-04	.5412-04	.2900-01	.3620	539.1
37	3.0000	.90000	53.000	.2200-02	.1800-02	.2500-02	.6401-04	.5287-04	.7155-04	.3900-01	.5380	539.7
37	3.0000	.92500	54.000	.3300-02	.2700-02	.3700-02	.9649-04	.7970-04	.1079-03	.5800-01	.7630	539.9
37	3.0000	.95000	55.000	.3400-02	.2800-02	.3800-02	.9855-04	.8140-04	.1102-03	.5900-01	.6020	539.8
37	4.0000	.20000	71.000	.3420-01	.2810-01	.3630-01	.9907-03	.8159-03	.1109-02	.5870	6.687	549.6
37	4.0000	.22500	72.000	.2900-01	.2390-01	.3250-01	.8412-03	.6934-03	.9416-03	.5010	5.865	546.7
37	4.0000	.25000	73.000	.2690-01	.2220-01	.3010-01	.7793-03	.6426-03	.8720-03	.4650	5.450	545.2
37	4.0000	.27500	74.000	.2690-01	.2380-01	.3230-01	.8371-03	.6904-03	.9356-03	.5000	6.185	544.9
37	4.0000	.30000	75.000	.3100-01	.2550-01	.3470-01	.9001-03	.7424-03	.1077-02	.5380	7.046	544.6
37	4.0000	.32500	76.000	.2570-01	.2120-01	.2870-01	.7448-03	.6146-03	.8330-03	.4460	5.850	543.0
37	4.0000	.35000	77.000	.2260-01	.1870-01	.2530-01	.6561-03	.5416-03	.7337-03	.3940	5.165	542.0
37	4.0000	.37500	78.000	.1960-01	.1530-01	.2070-01	.5379-03	.4442-03	.6014-03	.3240	4.248	540.6
37	4.0000	.40000	79.000	.1060-01	.8700-02	.1180-01	.3063-03	.2530-03	.3422-03	.1850	2.425	539.3
37	4.0000	.42500	80.000	.7400-02	.6100-02	.8300-02	.2145-03	.1772-03	.2397-03	.1290	1.700	538.8

(RVB002)

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-B8A) 862C12F10M16H127E52VBR19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R-0.9	H/HREF R-1.0	H/HREF R-TAM	H(9T0) BTU/ R FT2SEC	H(1T0) BTU/ R FT2SEC	H(TAM) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TW DEG. R
37	4.0000	.45000	62.000	.5400-02	.4400-02	.6000-02	.1552-03	.1282-03	.1734-03	.9400-01	1.218	538.1
37	4.0000	.47500	63.000	.4600-02	.3800-02	.5200-02	.1344-03	.1111-03	.1502-03	.8100-01	1.037	538.2
37	4.0000	.50000	64.000	.3100-02	.2600-02	.3500-02	.9086-04	.7510-04	.1015-03	.5500-01	.6820	537.7
37	4.0000	.52500	65.000	.2500-02	.2000-02	.2700-02	.7128-04	.5891-04	.7963-04	.4300-01	.5350	537.5
37	4.0000	.55000	66.000	.6000-03	.5000-03	.6000-03	.1655-04	.1376-04	.1860-04	.1000-01	.1190	537.2
37	4.0000	.60000	67.000	.6000-03	.5000-03	.7000-03	.1780-04	.1472-04	.1989-04	.1100-01	.1220	536.6
37	4.0000	.65000	68.000	.1000-02	.8000-03	.1100-02	.2860-04	.2364-04	.3195-04	.1700-01	.2040	537.2
37	4.0000	.70000	69.000	.1200-02	.1000-02	.1400-02	.3512-04	.2903-04	.3924-04	.2100-01	.2370	537.6
37	4.0000	.75000	70.000	.1700-02	.1400-02	.1900-02	.4908-04	.4057-04	.5484-04	.3000-01	.3320	537.7
37	4.0000	.80000	75.000	.6000-03	.5000-03	.7000-03	.1884-04	.1557-04	.2106-04	.1100-01	.1370	538.4
37	4.0000	.85000	76.000	.1600-02	.1300-02	.1700-02	.4517-04	.3734-04	.5046-04	.2700-01	.3250	536.8
37	4.0000	.87500	77.000	.9000-03	.7000-03	.1000-02	.2586-04	.2137-04	.2889-04	.1600-01	.2050	538.2
37	4.0000	.90000	78.000	.2700-02	.2200-02	.3000-02	.7892-04	.6519-04	.8820-04	.4800-01	.6180	539.2
37	4.0000	.92500	79.000	.4800-02	.3500-02	.5300-02	.1382-03	.1142-03	.1545-03	.8300-01	1.034	539.3
37	4.0000	.95000	80.000	.4100-02	.3400-02	.4600-02	.1194-03	.9865-04	.1335-03	.7200-01	.8450	540.2

DATE 07 OCT 75

0M-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 172

0M-74 (AEDC V41B-88A) B62C12F10H16H127E52V8R19

(RV8002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
46	7.980	29.83	418.9	1288.	-30.02	1.000	93.80	.4400-01	1.944	3786.	.3902-04	.7549-07

RUN NUMBER	RM/L X10 6 /FT	MREF BTU/ R FT2SEC	STN NO R= .0175 .2895-01
46	1.957		

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(STO) BTU/ R FT2SEC	H(TOI) BTU/ R FT2SEC	H(TAH) BTU/ R FT2SEC	ODOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
46	1.0000	.27500	1.0000	.1950-01	.1280-01	.1730-01	.5302-03	.4385-03	.5920-03	.3270	3.390	542.6
46	1.0000	.30000	2.0000	.1330-01	.1100-01	.1480-01	.4541-03	.3757-03	.5071-03	.2800	2.975	542.3
46	1.0000	.32500	3.0000	.1340-01	.1110-01	.1500-01	.4580-03	.3790-03	.5114-03	.2830	2.907	541.7
46	1.0000	.35000	4.0000	.1290-01	.1070-01	.1440-01	.4413-03	.3651-03	.4926-03	.2720	2.827	541.7
46	1.0000	.37500	5.0000	.1150-01	.9500-02	.1290-01	.3937-03	.3257-03	.4396-03	.2430	2.554	542.3
46	1.0000	.40000	6.0000	.1870-01	.1550-01	.2090-01	.6388-03	.5284-03	.7134-03	.3940	4.044	543.0
46	1.0000	.42500	7.0000	.1890-01	.1560-01	.2110-01	.6453-03	.5336-03	.7207-03	.3970	4.116	543.7
46	1.0000	.45000	8.0000	.2330-01	.1930-01	.2600-01	.7965-03	.6896-03	.8896-03	.4900	5.008	544.0
46	1.0000	.47500	9.0000	.2000-01	.1650-01	.2240-01	.6842-03	.5658-03	.7642-03	.4210	4.283	543.9
46	1.0000	.50000	10.000	.2720-01	.2250-01	.3040-01	.9291-03	.7681-03	.1038-02	.5710	5.778	544.9
46	1.0000	.52500	11.000	.3520-01	.2910-01	.3930-01	.1202-02	.9934-03	.1343-02	.7370	7.449	546.5
46	1.0000	.55000	12.000	.3640-01	.3010-01	.4070-01	.1245-02	.1028-02	.1391-02	.7630	7.647	546.2
46	1.0000	.60000	13.000	.3350-01	.2770-01	.3740-01	.1144-02	.9454-03	.1279-02	.7000	7.082	547.1
46	1.0000	.65000	14.000	.2330-01	.1920-01	.2600-01	.7951-03	.6575-03	.8881-03	.4690	4.953	544.1
46	1.0000	.70000	15.000	.2010-01	.1670-01	.2250-01	.6884-03	.5693-03	.7688-03	.4240	4.141	543.6
46	1.0000	.75000	16.000	.1290-01	.1070-01	.1440-01	.4409-03	.3647-03	.4923-03	.2720	2.737	542.2
46	1.0000	.80000	17.000	.7100-02	.5900-02	.7900-02	.2422-03	.2003-03	.2704-03	.1490	1.448	542.6
46	1.0000	.85000	18.000	.1710-01	.1410-01	.1910-01	.5833-03	.4826-03	.65.2-03	.3600	4.225	542.1
46	2.0000	.28500	19.000	.1440-01	.1190-01	.1610-01	.4931-03	.4079-03	.5505-03	.3040	3.590	542.2
46	2.0000	.33700	20.000	.2750-01	.2270-01	.3070-01	.9391-03	.7765-03	.1049-02	.5770	6.805	544.4
46	2.0000	.39000	21.000	.3450-01	.2850-01	.3850-01	.1178-02	.9738-03	.1317-02	.7230	8.465	546.0
46	2.0000	.42600	22.000	.5120-01	.4230-01	.5730-01	.1751-02	.1446-02	.1958-02	1.070	11.89	548.4

DATE 07 OCT 75

OH-7A (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 173

(RV8002)

OH-7A (AEDC V418-B8A) B62C12F10H16M127E32V8R19

RUN NUMBER	TRA-E	X/L	T/C NO	H/HREF R-0.9	H/HREF R-1.0	H/HREF R-TAN	H(IGT) BTU/ R FT2SEC	H(ITO) BTU/ R FT2SEC	H(ITAH) BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
45	2.0000	.53000	23.000	.2990-01	.2470-01	.3350-01	.1024-02	.8460-03	.1144-02	.6280	6.985	546.0
46	2.0000	.56700	24.000	.2060-01	.1700-01	.2300-01	.7039-03	.5821-03	.7862-03	.4330	4.709	543.7
46	2.0000	.62000	25.000	.1410-01	.1170-01	.1580-01	.4830-03	.3995-03	.5393-03	.2980	3.239	542.6
46	2.0000	.67000	26.000	.1090-01	.9000-02	.1210-01	.3713-03	.3072-03	.4145-03	.2290	2.496	541.4
46	2.0000	.70500	27.000	.9100-02	.7600-02	.1020-01	.3128-03	.2588-03	.3491-03	.1930	2.083	541.2
46	2.0000	.75000	28.000	.6700-02	.5600-02	.7500-02	.2307-03	.1909-03	.2575-03	.1430	1.568	540.8
46	2.0000	.80000	29.000	.7200-02	.2600-02	.3500-02	.1087-03	.8994-04	.1213-03	.6700-01	.7430	540.6
46	2.0000	.20000	31.000	.2470-01	.2660-01	.3610-01	.1103-02	.9104-03	.1234-02	.6710	7.091	551.2
46	3.0000	.22500	32.000	.2880-01	.2370-01	.3210-01	.9835-03	.8118-03	.1099-02	.6010	6.710	548.2
46	3.0000	.25000	33.000	.2180-01	.1810-01	.2440-01	.7469-03	.6175-03	.8343-03	.4590	5.137	544.6
46	3.0000	.27500	34.000	.1750-01	.1450-01	.1960-01	.5988-03	.4953-03	.6886-03	.3690	4.427	542.4
46	3.0000	.30000	35.000	.1570-01	.1300-01	.1750-01	.5352-03	.4429-03	.5975-03	.3310	4.098	541.4
46	3.0000	.32500	36.000	.1620-01	.1340-01	.1810-01	.5538-03	.4582-03	.6182-03	.3420	4.015	541.7
46	3.0000	.35000	37.000	.2490-01	.2060-01	.2780-01	.8516-03	.7043-03	.9510-03	.5250	6.088	543.3
46	3.0000	.37500	38.000	.3640-01	.3010-01	.4070-01	.1246-02	.1030-02	.1392-02	.7650	8.971	544.8
46	3.0000	.40000	39.000	.3850-01	.3180-01	.4300-01	.1316-02	.1088-02	.1470-02	.8080	9.516	545.3
46	3.0000	.42500	40.000	.3590-01	.2970-01	.4010-01	.1227-02	.1014-02	.1371-02	.7520	8.903	546.2
46	3.0000	.45000	41.000	.3950-01	.3270-01	.4420-01	.1351-02	.1117-02	.1510-02	.8290	9.462	545.8
46	3.0000	.47500	42.000	.2810-01	.2320-01	.3140-01	.9601-03	.7938-03	.1073-02	.5900	6.572	544.6
46	3.0000	.50000	43.000	.1970-01	.1630-01	.2200-01	.6737-03	.5571-03	.7523-03	.4150	4.624	543.3
46	3.0000	.52500	44.000	.1420-01	.1180-01	.1590-01	.4865-03	.4025-03	.5432-03	.3000	3.524	542.1
46	3.0000	.55000	45.000	.1190-01	.9800-02	.1320-01	.4054-03	.3354-03	.4525-03	.2500	2.792	541.5
46	3.0000	.60000	46.000	.7700-02	.6400-02	.8600-02	.2640-03	.2185-03	.2947-03	.1630	1.777	540.9
46	3.0000	.65000	47.000	.5700-02	.4700-02	.6400-02	.1952-03	.1616-03	.2178-03	.1210	1.284	540.3
46	3.0000	.70000	48.000	.3700-02	.3000-02	.4100-02	.1258-03	.1041-03	.1404-03	.7800-01	.8600	540.3
46	3.0000	.75000	49.000	.2100-02	.1800-02	.2400-02	.7296-04	.6040-04	.8143-04	.4500-01	.4920	539.8
46	3.0000	.80000	50.000	.7000-03	.6000-03	.8000-03	.2555-04	.2115-04	.2852-04	.1600-01	1.700	539.7
46	3.0000	.85000	51.000	.1600-02	.1400-02	.1800-02	.1615-04	.4646-04	.6269-04	.3500-01	.4300	541.6
46	3.0000	.87500	52.000	.1400-02	.1200-02	.1600-02	.4819-04	.3985-04	.5381-04	.3000-01	.3680	542.9
46	3.0000	.90000	53.000	.1000-02	.9000-03	.1200-02	.3569-04	.2952-04	.3986-04	.2200-01	.3060	543.5
46	3.0000	.92500	54.000	.1000-02	.9000-03	.1200-02	.3534-04	.2923-04	.3947-04	.2200-01	.2850	543.6
46	3.0000	.95000	55.000	.1200-02	.1000-02	.1300-02	.3995-04	.3305-04	.4461-04	.2500-01	.2500	542.7
46	4.0000	.20000	71.000	.3910-01	.3220-01	.4380-01	.1137-02	.1102-02	.1496-02	.8070	9.164	555.6
46	4.0000	.22500	72.000	.2980-01	.2460-01	.3330-01	.1017-02	.8393-03	.1138-02	.6180	7.226	551.1
46	4.0000	.25000	73.000	.2400-01	.1990-01	.2690-01	.8217-03	.6788-03	.9185-03	.5020	5.879	547.8
46	4.0000	.27500	74.000	.2250-01	.1860-01	.2520-01	.7706-03	.6358-03	.8611-03	.4720	5.838	546.3
46	4.0000	.30000	56.000	.2060-01	.1700-01	.2300-01	.7027-03	.5810-03	.7849-03	.4320	5.662	544.3
46	4.0000	.32500	57.000	.4040-01	.3340-01	.4520-01	.1382-02	.1141-02	.1545-02	.8450	11.04	548.1
46	4.0000	.35000	58.000	.4600-01	.3790-01	.5140-01	.1382-02	.1157-02	.1757-02	.9560	12.49	550.4
46	4.0000	.37500	59.000	.2910-01	.2410-01	.3260-01	.9961-03	.8232-03	.1113-02	.6110	8.002	545.7
46	4.0000	.40000	60.000	.1920-01	.1590-01	.2140-01	.6562-03	.5426-03	.7329-03	.4040	5.292	543.8
46	4.0000	.42500	61.000	.1380-01	.1140-01	.1540-01	.4724-03	.3908-03	.5275-03	.2910	3.820	542.6
46	4.0000	.45000	62.000	.9700-02	.8000-02	.1080-01	.3310-03	.2739-03	.3696-03	.2040	2.651	541.6

DATE 07 OCT 75

ON-74 (AEDC V41B-88A) PLATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 174

ON-74 (AEDC V41B-88A) BREC12F10M18W127E52V8R19

(RVB002)

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1(9T) BTU/ R FT2SEC	H1(7O) BTU/ R FT2SEC	H1(TAH) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TM DEG. R
45	4.0000	.47500	63.000	.7100-02	.5900-02	.8000-02	.2440-03	.2019-03	.2724-03	.1510	1.921	541.5
46	4.0000	.50000	64.000	.5100-02	.4200-02	.5700-02	.1735-03	.1436-03	.1937-03	.1070	1.331	540.6
46	4.0000	.52500	65.000	.4600-02	.3800-02	.5200-02	.1586-03	.1313-03	.1771-03	.9800-01	1.217	540.4
46	4.0000	.55000	66.000	.4300-02	.3600-02	.4800-02	.1473-03	.1219-03	.1644-03	.9100 01	1.071	540.3
46	4.0000	.60000	67.000	.3100-02	.2500-02	.3400-02	.1052-03	.8714-04	.1174-03	.6500-01	.7360	539.2
46	4.0000	.65000	68.000	.2000-02	.1700-02	.2300-02	.7004-04	.5900-04	.7816-04	.4300-01	.5110	539.1
46	4.0000	.70000	69.000	.7000-03	.6000-03	.8000-03	.2514-04	.2082-04	.2806-04	.1600-01	.1740	539.5
46	4.0000	.75000	70.000	.1200-02	.1000-02	.1300-02	.4083-04	.3381-04	.4556-04	.2500-01	.2830	538.9
46	4.0000	.80000	75.000	.6000-03	.5000-03	.7000-03	.2108-04	.1745-04	.2353-04	.1300-01	.1580	539.7
46	4.0000	.87500	77.000	.5000-03	.4000-03	.5000-03	.1656-04	.1371-04	.1848-04	.1000-01	.1350	540.2
46	4.0000	.90000	78.000	.7000-03	.6000-03	.8000-03	.2303-04	.1906-04	.2571-04	.1400-01	.1850	540.7
46	4.0000	.92500	79.000	.5800-02	.4800-02	.6500-02	.1995-03	.1651-03	.2226-03	.1240	1.532	541.2
46	4.0000	.95000	80.000	.1100-02	.9000-03	.1200-02	.3795-04	.3140-04	.4236-04	.0000	.0000	583.3

DATE 07 OCT 75

OH-7A (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 175

(RV8002)

OH-7A (AEDC V418-B8A) B62C12F10M16H127E52V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
47	7.980	34.91	417.9	1290.	168.8	1.000	93.90	.4400-01	1.939	3789.	.3887-04	.7561-07

RUN NUMBER	RM/L X10 6 /FT	REF BTU/ R FT ² SEC /FT	STN NO R=
47	1.948	.3419-01	.2901-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT ² SEC	H(1TO) BTU/ R FT ² SEC	H(1TAN) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	OTWDT DEG. R /SEC	TH DEG. R
47	1.0000	.27500	1.0000	.1530-01	.1270-01	.1710-01	.5226-03	.4324-03	.5831-13	.3230	3.349	542.9
47	1.0000	.30000	2.0000	.1370-01	.1130-01	.1530-01	.4680-03	.3873-03	.5225-03	.2900	3.074	542.3
47	1.0000	.32500	3.0000	.1150-01	.9500-02	.1250-01	.3939-03	.3261-03	.4397-03	.2440	2.509	541.4
47	1.0000	.35000	4.0000	.1300-01	.1070-01	.1450-01	.4426-03	.3664-03	.4941-03	.2740	2.847	541.2
47	1.0000	.37500	5.0000	.1740-01	.1440-01	.1940-01	.5935-03	.4910-03	.6626-03	.3670	3.859	542.6
47	1.0000	.40000	6.0000	.2270-01	.1880-01	.2530-01	.7754-03	.6416-03	.8656-03	.4800	4.929	542.3
47	1.0000	.42500	7.0000	.1820-01	.1510-01	.2040-01	.6232-03	.5156-03	.6958-03	.3850	3.994	542.9
47	1.0000	.45000	8.0000	.2000-01	.1660-01	.2240-01	.6842-03	.5662-03	.7638-03	.4240	4.334	541.9
47	1.0000	.47500	9.0000	.2930-01	.2420-01	.3270-01	.9995-03	.8267-03	.1116-02	.6170	6.273	544.0
47	1.0000	.50000	10.000	.2350-01	.1950-01	.2630-01	.8037-03	.6849-03	.8973-03	.4970	5.034	542.9
47	1.0000	.52500	11.000	.2990-01	.2480-01	.3340-01	.1022-02	.8454-03	.1141-02	.6310	6.392	543.6
47	1.0000	.55000	12.000	.3180-01	.2630-01	.3560-01	.1088-02	.8995-03	.1214-02	.6710	6.735	544.0
47	1.0000	.60000	13.000	.2180-01	.1810-01	.2440-01	.7458-03	.6170-03	.8327-03	.4610	4.668	543.2
47	1.0000	.65000	14.000	.2460-01	.2040-01	.2750-01	.8413-03	.6959-03	.9393-03	.5200	5.264	543.3
47	1.0000	.70000	15.000	.1340-01	.1110-01	.1490-01	.4569-03	.3781-03	.5100-03	.2830	2.768	541.7
47	1.0000	.75000	16.000	.7000-02	.5800-02	.7900-02	.2403-03	.1989-03	.2682-03	.1490	1.511	540.9
47	1.0000	.80000	17.000	.2600-02	.2100-02	.2900-02	.6782-04	.7271-04	.9801-04	.5500-01	.5290	540.4
47	1.0000	.85000	18.000	.1710-01	.1410-01	.1900-01	.5827-03	.4820-03	.6516-03	.3600	4.223	543.2
47	2.0000	.33700	19.000	.1520-01	.1260-01	.1700-01	.5194-03	.4297-03	.5799-03	.3210	3.786	542.9
47	2.0000	.39000	20.000	.3030-01	.2510-01	.3390-01	.1036-02	.8567-03	.1157-02	.6380	7.523	544.8
47	2.0000	.42600	21.000	.2350-01	.1940-01	.2620-01	.8021-03	.6634-03	.8957-03	.4950	5.804	543.9
47	2.0000	.47800	22.000	.2600-01	.2150-01	.2900-01	.8880-03	.7345-03	.9916-03	.5180	6.108	543.6

(RY8002)

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-BBA) 862C12F10M16M127E52V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAW	H(9T0) BTU/ R FT2SEC	H(1T0) BTU/ R FT2SEC	H(1T0) BTU/ R FT2SEC	H(1T0) BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTWOT DEG. R /SEC	T4 DEG. R
47	4.0000	.45000	62.000	.7200-02	.6000-02	.8000-02	.2457-03	.2034-03	.2742-03	.2742-03	.1530	1.980	540.1
47	4.0000	.47500	63.000	.6000-02	.4900-02	.6600-02	.2034-03	.1684-03	.2269-03	.2269-03	.1260	1.611	539.9
47	4.0000	.50000	64.000	.4500-02	.3800-02	.5100-02	.1550-03	.1284-03	.1730-03	.1730-03	.9600-01	1.196	539.2
47	4.0000	.52500	65.000	.4300-02	.3500-02	.4800-02	.1455-03	.1205-03	.1623-03	.1623-03	.9000-01	1.123	539.1
47	4.0000	.55000	66.000	.3800-02	.3100-02	.4200-02	.1295-03	.1073-03	.1445-03	.1445-03	.8100-01	.9470	539.1
47	4.0000	.60000	67.000	.2200-02	.1900-02	.2500-02	.7527-04	.6235-04	.8396-04	.8396-04	.4700-01	.5290	538.4
47	4.0000	.65000	68.000	.8000-03	.6000-03	.9000-03	.2664-04	.2206-04	.2971-04	.2971-04	.1700-01	.1950	538.3
47	4.0000	.70000	69.000	.8000-03	.7000-03	.9000-03	.2683-04	.2222-04	.2993-04	.2993-04	.1700-01	.1860	539.0
47	4.0000	.75000	70.000	.1100-02	.9000-03	.1200-02	.3721-04	.3082-04	.4151-04	.4151-04	.2300-01	.2580	539.1
47	4.0000	.80000	75.000	.6000-03	.5000-03	.7000-03	.2192-04	.1815-04	.2447-04	.2447-04	.1400-01	.1640	540.3
47	4.0000	.87500	77.000	.7000-03	.6000-03	.8000-03	.2414-04	.1998-04	.2694-04	.2694-04	.1500-01	.1970	540.4
47	4.0000	.90000	78.000	.7000-03	.6000-03	.8000-03	.2526-04	.2091-04	.2819-04	.2819-04	.1600-01	.2030	540.8
47	4.0000	.92500	79.000	.1300-02	.1100-02	.1400-02	.4381-04	.3627-04	.4890-04	.4890-04	.2700-01	.3370	540.8
47	4.0000	.95000	80.000	.1100-02	.9000-03	.1200-02	.3795-04	.3140-04	.4236-04	.4236-04	.0000	.0000	583.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 178

ORBITER FUSELAGE

OH-74 (AEDC V41B-B8A) B62C12F10H16H127E52V8R19

(RVB002)

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
48	7.920	39.91	417.4	1290.	174.4	1.000	93.90	4300-01	1.937	3789.	.3882-04	.7561-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R=
48	1.946	.3413-01	.2903-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	R-TAW R=	H1(9T0) BTU/ R FT ² SEC	H1(0) BTU/ R FT ² SEC	H1(TAH) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTMDT DEG. R /SEC	TW DEG. R
48	1.0000	.2750	1.0000	.1660-01	.1370-01	.1850-01	.5669-03	.4688-03	.6331-03	.3500	3.622	544.3
48	1.0000	.3000	2.0000	.1390-01	.1150-01	.1560-01	.4759-03	.3937-03	.5314-03	.2940	3.118	543.5
48	1.0000	.3250	3.0000	.1270-01	.1050-01	.1420-01	.4351-03	.3600-03	.4858-03	.2690	2.765	542.5
48	1.0000	.3500	4.0000	.1740-01	.1440-01	.1940-01	.5944-03	.4917-03	.6635-03	.3670	3.807	543.2
48	1.0000	.3750	5.0000	.1900-01	.1570-01	.2120-01	.6460-03	.5360-03	.7235-03	.4000	4.205	543.6
48	1.0000	.4000	6.0000	.2040-01	.1680-01	.2270-01	.6948-03	.5748-03	.7758-03	.4290	4.410	543.1
48	1.0000	.4250	7.0000	.1740-01	.1440-01	.1940-01	.5944-03	.4917-03	.6635-03	.3670	3.807	543.3
48	1.0000	.4500	8.0000	.2960-01	.2450-01	.3300-01	.1009-02	.8349-03	.1127-02	.6230	6.365	544.0
48	1.0000	.4750	9.0000	.2420-01	.2010-01	.2710-01	.8277-03	.6845-03	.9243-03	.5110	5.193	544.1
48	1.0000	.5000	10.000	.2380-01	.1970-01	.2660-01	.8139-03	.6733-03	.9088-03	.5030	5.094	543.2
48	1.0000	.5250	11.000	.3170-01	.2620-01	.3540-01	.1083-02	.8959-03	.1210-02	.6680	6.764	544.3
48	1.0000	.5500	12.000	.2810-01	.2330-01	.3140-01	.9608-03	.7948-03	.1073-02	.5930	5.954	543.6
48	1.0000	.6000	13.000	.2550-01	.2110-01	.2860-01	.8729-03	.7219-03	.9748-03	.5380	5.451	544.3
48	1.0000	.6500	14.000	.1540-01	.1270-01	.1720-01	.5258-03	.4351-03	.5871-03	.3250	3.294	542.8
48	1.0000	.7000	15.000	.4700-02	.3900-02	.5200-02	.1600-03	.1324-03	.1786-03	.9900-01	.9700	541.4
48	1.0000	.7500	16.000	.4000-03	.4000-03	.5000-03	.1462-04	.1211-04	.1632-04	.9000-02	.9200-01	540.2
48	1.0000	.8000	17.000	.1300-02	.1100-02	.1500-02	.4472-04	.3702-04	.4991-04	.2800-01	.2690	540.7
48	2.0000	.28500	18.000	.1630-01	.1340-01	.1820-01	.5547-03	.4586-03	.6126-03	.3420	4.003	545.2
48	2.0000	.33700	19.000	.2100-01	.1740-01	.2350-01	.7175-03	.5933-03	.8013-03	.4420	5.211	544.7
48	2.0000	.39000	20.000	.2270-01	.1980-01	.2540-01	.7758-03	.6415-03	.8664-03	.4780	5.638	544.3
48	2.0000	.42600	21.000	.3770-01	.3110-01	.4210-01	.1285-02	.1062-02	.1436-02	.7900	9.250	546.4
48	2.0000	.47800	22.000	.2920-01	.2420-01	.3260-01	.9977-03	.8250-03	.1114-02	.6150	6.844	544.9

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 179

(RV8002)

04-74 (AEDC V418-B8A) 862C12F10M16W127E52V8R19

RUN NUMBER	TRAIL E	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H1970) BTU/ R FTESEC	H170) BTU/ R FTESEC	H1TAH) BTU/ R FTESEC	QOOT BTU/ FTESEC	DTMOT DEG. R /SEC	TW DEG. R
48	2.0000	.93000	23.000	.2260-01	.1870-01	.2530-01	.7720-03	.6184-03	.8621-03	.760	5.302	544.3
48	2.0000	.96700	24.000	.1480-01	.1230-01	.1650-01	.5054-03	.4181-03	.5643-03	.3120	3.398	542.7
48	2.0000	.62000	25.000	.9400-02	.7800-02	.1050-01	.3224-03	.2668-03	.3598-03	.2000	2.174	541.2
48	2.0000	.67000	26.000	.4100-02	.3400-02	.4600-02	.1394-03	.1154-03	.1556-03	.8700-01	.9420	540.5
48	2.0000	.70500	27.000	.1600-02	.1300-02	.1800-02	.5487-04	.4544-04	.6123-04	.3400-01	.3680	539.6
48	2.0000	.75000	28.000	.2300-02	.1900-02	.2500-02	.7692-04	.6369-04	.8583-04	.4800-01	.5260	539.7
48	2.0000	.80000	29.000	.1900-02	.1600-02	.2100-02	.6524-04	.5402-04	.7280-04	.4100-01	.4480	539.9
48	2.0000	.82400	30.000	.8000-03	.7000-03	.9000-03	.2839-04	.2350-04	.3169-04	.1800-01	.2460	539.9
48	3.0000	.20000	31.000	.3440-01	.2840-01	.3850-01	.1176-02	.9707-03	.1315-02	.7180	7.589	550.6
48	3.0000	.22500	32.000	.2900-01	.2400-01	.3250-01	.9910-03	.8184-03	.1108-02	.6060	6.768	549.3
48	3.0000	.25000	33.000	.2160-01	.1780-01	.2410-01	.7372-03	.6092-03	.8236-03	.4530	5.059	547.1
48	3.0000	.27500	34.000	.1720-01	.1420-01	.1920-01	.5855-03	.4841-03	.6541-03	.3610	4.315	545.3
48	3.0000	.30000	35.000	.1660-01	.1370-01	.1860-01	.5673-03	.4691-03	.6335-03	.3500	4.328	544.4
48	3.0000	.32500	36.000	.2830-01	.2340-01	.3160-01	.9661-03	.7986-03	.1075-02	.5940	6.961	545.9
48	3.0000	.35000	37.000	.3180-01	.2630-01	.3550-01	.1086-02	.8973-03	.1213-02	.6670	7.735	546.3
48	3.0000	.37500	38.000	.2370-01	.1960-01	.2640-01	.8074-03	.6877-03	.9018-03	.4980	5.833	544.7
48	3.0000	.40000	39.000	.2850-01	.2350-01	.3180-01	.9724-03	.8042-03	.1086-02	.6000	7.067	544.4
48	3.0000	.42500	40.000	.2590-01	.2470-01	.3340-01	.1021-02	.8439-03	.1140-02	.6280	7.435	545.9
48	3.0000	.45000	41.000	.2310-01	.1910-01	.2580-01	.7896-03	.6531-03	.8817-03	.4870	5.570	543.6
48	3.0000	.47500	42.000	.2180-01	.1810-01	.2440-01	.7453-03	.6165-03	.8322-03	.4600	5.129	543.4
48	3.0000	.50000	43.000	.1540-01	.1280-01	.1720-01	.5272-03	.4362-03	.5686-03	.3260	3.635	542.5
48	3.0000	.52500	44.000	.9200-02	.7600-02	.1030-01	.3154-03	.2611-03	.3520-03	.1950	2.297	540.8
48	3.0000	.55000	45.000	.7800-02	.6500-02	.8700-02	.2663-03	.2204-03	.2972-03	.1650	1.843	540.7
48	3.0000	.60000	46.000	.5300-02	.4400-02	.5900-02	.1803-03	.1493-03	.2012-03	.1120	1.220	539.7
48	3.0000	.70000	48.000	.1500-02	.1300-02	.1700-02	.5265-04	.4361-04	.5674-04	.5400-01	.5760	539.2
48	3.0000	.80000	50.000	.1900-02	.1600-02	.2200-02	.6644-04	.5502-04	.7413-04	.3300-01	.3620	538.9
48	3.0000	.85000	51.000	.2400-02	.1900-02	.2600-02	.8028-04	.6847-04	.8959-04	.5000-01	.5350	539.4
48	3.0000	.87500	52.000	.1500-02	.1200-02	.1600-02	.4771-04	.3949-04	.5325-04	.3000-01	.3670	541.1
48	3.0000	.90000	53.000	.1700-02	.1400-02	.1900-02	.5683-04	.4704-04	.6344-04	.3200-01	.3940	541.1
48	3.0000	.92500	54.000	.2700-02	.2200-02	.3000-02	.9139-04	.7563-04	.9344-04	.3500-01	.4910	541.5
48	3.0000	.95000	55.000	.4700-02	.3900-02	.5300-02	.1613-03	.1335-03	.1801-03	.1020-01	.7420	542.0
48	4.0000	.20000	71.000	.3440-01	.2840-01	.3840-01	.1173-02	.9677-03	.1312-02	.7130	8.113	552.9
48	4.0000	.22500	72.000	.2790-01	.2310-01	.3130-01	.9540-03	.7876-03	.1067-02	.5820	6.807	550.5
48	4.0000	.25000	73.000	.2540-01	.2100-01	.2840-01	.8669-03	.7161-03	.9690-03	.5310	6.209	548.7
48	4.0000	.27500	74.000	.2800-01	.2310-01	.3130-01	.9548-03	.7886-03	.1067-02	.5850	7.218	548.8
48	4.0000	.30000	76.000	.3050-01	.2520-01	.3410-01	.1041-02	.8600-03	.1153-02	.6390	8.355	547.4
48	4.0000	.32500	77.000	.2950-01	.2440-01	.3300-01	.1007-02	.8324-03	.1125-02	.6190	8.094	546.9
48	4.0000	.35000	78.000	.2430-01	.2000-01	.2710-01	.8279-03	.6843-03	.9249-03	.5090	6.663	546.2
48	4.0000	.37500	79.000	.2310-01	.1910-01	.2590-01	.7902-03	.6534-03	.8826-03	.4870	6.377	544.9
48	4.0000	.40000	80.000	.1420-01	.1170-01	.1580-01	.4842-03	.4006-03	.5406-03	.2990	3.925	542.8
48	4.0000	.42500	81.000	.9100-02	.7500-02	.1010-01	.3104-03	.2569-03	.3464-03	.1920	2.525	541.1

DATE 07 OCT 75

ON-7N (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 180

ON-7N (AEDC V418-B8A) 862C12F10H16M127E52V8R19

(RV8002)

RUN NUMBER	TRA/E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1ST0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QDOT BTU/ FT2SEC	OTDOT DEG. R /SEC	TH DEG. R
48	4.0000	45000	62.000	.6400-02	.5300-02	.7100-02	.2176-03	.1902-03	.2429-03	.1350	1.752	540.5
48	4.0000	47500	63.000	.5100-02	.4200-02	.5700-02	.1746-03	.1448-03	.1948-03	.1080	1.383	539.9
48	4.0000	50000	64.000	.4600-02	.3800-02	.5100-02	.1557-03	.1289-03	.1737-03	.9700-01	1.201	539.2
48	4.0000	52500	65.000	.3400-02	.2800-02	.3800-02	.1167-03	.9683-04	.1302-03	.7300-01	.9000	539.4
48	4.0000	55000	66.000	.3000-02	.2500-02	.3300-02	.1011-03	.8373-04	.1128-03	.6300-01	.7380	539.1
48	4.0000	60000	67.000	.1000-02	.8000-03	.1100-02	.3428-04	.2839-04	.3824-04	.2100-01	.2410	538.2
48	4.0000	65000	68.000	.9000-03	.7000-03	.1000-02	.3026-04	.2506-04	.3375-04	.1900-01	.2210	538.6
48	4.0000	70000	69.000	.1200-02	.1000-02	.1300-02	.4035-04	.3341-04	.4502-04	.2500-01	.2800	539.9
48	4.0000	75000	70.000	.1200-02	.1000-02	.1300-02	.4019-04	.3328-04	.4484-04	.2500-01	.2790	539.7
48	4.0000	80000	75.000	.1200-02	.1000-03	.1200-02	.3593-04	.2974-04	.4010-04	.2200-01	.2690	540.8
48	4.0000	85000	76.000	.1200-02	.1000-02	.1300-02	.4041-04	.3347-04	.4509-04	.2500-01	.2390	539.1
48	4.0000	87500	77.000	.6000-03	.5000-03	.7000-03	.2135-04	.1768-04	.2383-04	.1300-01	.1740	540.5
48	4.0000	90000	78.000	.1200-02	.1000-02	.1400-02	.4130-04	.3419-04	.4610-04	.2600-01	.3320	541.1
48	4.0000	92500	79.000	.700-02	.2200-02	.2900-02	.8924-04	.7386-04	.9961-04	.5500-01	.6850	541.5
48	4.0000	95000	80.000	.4100-02	.3400-02	.4500-02	.1385-03	.1146-03	.1546-03	.8600-01	1.006	541.8

DATE 07 OCT 75

04-74 (AEDC W18-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 181

ORBITER FUSELAGE

04-74 (AEDC W18-B8A) 862C12F10H18J127E52V8R19

(RV5002)

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUOS /FT3	MU LB-SEC /FT2
49	7.980	44.21	418.7	1290.	176.0	1.000	93.90	.4400-01	1.943	3789.	.3834-04	.7561-07

RUN NUMBER	RM/L X10 6	WREF BTU/ R FT2SEC	STN NO R= .0175
49	1.952	.3419-01	.2898-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	W/HREF R=0.9	W/HREF R=1.0	H/HREF R-TAN	H1970 BTU/ R FT2SEC	H101 BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
49	1.0000	.27500	1.0000	.1530-01	.1270-01	.1710-01	.5241-03	.4335-03	.5853-03	.3240	3.353	543.7
49	1.0000	.30000	2.0000	.1410-01	.1160-01	.1570-01	.4810-03	.3973-03	.5371-03	.2970	3.152	543.4
49	1.0000	.32500	3.0000	.1500-01	.1240-01	.1680-01	.5130-03	.4244-03	.5727-03	.3170	3.257	542.9
49	1.0000	.35000	4.0000	.2200-01	.1820-01	.2460-01	.7535-03	.6233-03	.8414-03	.4650	4.822	543.5
49	1.0000	.37500	5.0000	.2010-01	.1670-01	.2250-01	.6883-03	.5693-03	.7687-03	.4250	4.463	544.0
49	1.0000	.40000	6.0000	.1820-01	.1510-01	.2040-01	.6238-03	.5160-03	.6966-03	.3850	3.956	543.5
49	1.0000	.42500	7.0000	.2350-01	.1950-01	.2630-01	.8047-03	.6655-03	.8986-03	.4960	5.142	544.3
49	1.0000	.45000	8.0000	.2960-01	.2440-01	.3300-01	.1010-02	.8355-03	.1128-02	.6230	6.365	544.5
49	1.0000	.47500	9.0000	.2050-01	.1700-01	.2290-01	.7010-03	.5798-03	.7828-03	.4330	4.403	543.7
49	1.0000	.50000	10.000	.2960-01	.2450-01	.3310-01	.1013-02	.8375-03	.1131-02	.6250	6.323	544.3
49	1.0000	.52500	11.000	.3750-01	.2770-01	.3750-01	.1147-02	.9481-03	.1281-02	.7060	7.150	544.9
49	1.0000	.55000	12.000	.2440-01	.2010-01	.2720-01	.8325-03	.6887-03	.9298-03	.5140	5.161	543.4
49	1.0000	.58000	13.000	.2050-01	.1690-01	.2290-01	.6998-03	.5788-03	.7814-03	.4320	4.373	543.9
49	1.0000	.60000	14.000	.7200-02	.6000-02	.8000-02	.2460-03	.2036-03	.2746-03	.1520	1.544	541.8
49	1.0000	.70000	15.000	.1600-02	.1300-02	.1800-02	.5559-04	.4602-04	.6204-04	.3400-01	.380	540.5
49	1.0000	.75000	16.000	.2700-02	.2300-02	.3100-02	.9373-04	.7759-04	.1046-03	.5800-01	.4900	540.8
49	1.0000	.80000	17.000	.2400-02	.2000-02	.2700-02	.8145-04	.6742-04	.9090-04	.5100-01	.5900	540.8
49	1.0000	.85000	18.000	.1540-01	.1270-01	.1720-01	.5250-03	.4342-03	.5863-03	.3240	3.795	544.4
49	2.0000	.28500	19.000	.2720-01	.2250-01	.3040-01	.9305-03	.7692-03	.1039-02	.5730	6.745	545.6
49	2.0000	.33700	20.000	.2330-01	.1930-01	.2610-01	.7978-03	.6598-03	.8910-03	.4920	5.799	544.3
49	2.0000	.39000	21.000	.3640-01	.3010-01	.4070-01	.1245-02	.1029-02	.1391-02	.7650	8.960	546.4
49	2.0000	.42600	22.000	.3240-01	.2680-01	.3620-01	.1108-02	.9159-03	.1237-02	.6820	7.592	545.4

(RV8002)

HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-7N (AEDC V41B-88A) B62C12F10H16M127E52V8R19

DATE 07 OCT 75

RUN NUMBER	TRACE	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R-TAH	H1ST0 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
49	2.0000	53000	23.000	.1840-01	.1530-01	.2060-01	.6306-03	.5216-03	.7041-03	.3900	4.341	543.2
49	2.0000	56700	24.000	.1290-01	.1060-01	.1440-01	.4398-03	.3639-03	.4910-03	.3900	2.959	542.3
49	2.0000	62000	25.000	.6500-02	.5400-02	.7300-02	.2232-03	.1847-03	.2491-03	.1380	1.506	541.1
49	2.0000	67000	26.000	.6500-02	.2000-02	.2700-02	.8413-04	.6968-04	.9386-04	.5200-01	.5700	539.0
49	2.0000	70500	27.000	.2500-02	.2100-02	.2800-02	.8608-04	.7130-04	.9604-04	.5400-01	.5780	538.8
49	2.0000	75000	28.000	.3800-02	.3200-02	.4300-02	.1303-03	.1079-03	.1454-03	.8100-01	.8910	539.5
49	2.0000	80000	29.000	.2800-02	.2300-02	.3100-02	.9467-04	.7839-04	.1056-03	.5900-01	.6500	539.7
49	2.0000	82400	30.000	.1000-02	.8000-03	.1100-02	.3286-04	.2721-04	.3666-04	.2030-01	.2850	539.7
49	3.0000	20000	31.000	.3420-01	.2830-01	.3830-01	.1171-02	.9666-13	.1309-02	.7150	7.563	550.2
49	3.0000	22500	32.000	.2740-01	.2270-01	.3070-01	.9379-03	.7748-03	.1048-02	.5750	6.418	548.4
49	3.0000	25000	33.000	.2210-01	.1830-01	.2470-01	.7570-03	.6257-03	.8457-03	.4650	5.204	546.4
49	3.0000	27500	34.000	.1770-01	.1460-01	.1970-01	.6034-03	.4990-03	.6739-03	.3720	5.271	544.7
49	3.0000	30000	35.000	.2020-01	.1670-01	.2260-01	.6905-03	.5711-03	.7711-03	.4260	7.981	545.9
49	3.0000	32500	36.000	.3240-01	.2680-01	.3620-01	.9502-03	.7856-03	.1061-02	.5850	6.785	545.2
49	3.0000	35000	37.000	.2780-01	.2300-01	.3100-01	.8554-03	.7073-03	.9554-03	.5270	6.180	544.6
49	3.0000	37500	38.000	.2500-01	.2070-01	.2790-01	.1045-02	.8645-03	.1169-02	.6440	7.593	544.6
49	3.0000	40000	39.000	.3060-01	.2530-01	.3420-01	.8365-03	.7413-03	.1001-02	.5520	6.542	544.9
49	3.0000	42500	40.000	.2620-01	.2170-01	.2930-01	.8126-03	.6722-03	.9074-03	.5020	5.735	543.5
49	3.0000	45000	41.000	.2380-01	.1970-01	.2650-01	.6620-03	.5477-03	.7351-03	.4090	4.561	542.9
49	3.0000	47500	42.000	.1940-01	.1600-01	.2160-01	.5620-03	.3272-03	.4414-03	.2530	2.731	541.7
49	3.0000	50000	43.000	.1160-01	.9600-02	.1290-01	.3954-03	.2144-03	.2891-03	.1610	1.887	540.8
49	3.0000	52500	44.000	.7600-02	.6300-02	.8500-02	.2590-03	.1790-03	.2413-03	.1340	1.498	540.3
49	3.0000	55000	45.000	.6300-02	.5200-02	.7100-02	.2162-03	.1112-03	.1499-03	.8300-01	.9090	539.7
49	3.0000	60000	46.000	.3900-02	.3300-02	.4400-02	.1343-03	.1112-03	.1499-03	.1000-01	.4300	538.7
49	3.0000	65000	47.000	.1900-02	.1600-02	.2100-02	.6490-04	.5375-04	.7240-04	.4200-01	.4620	538.6
49	3.0000	70000	48.000	.2000-02	.1600-02	.2200-02	.1225-03	.1015-03	.1367-03	.7600-01	.8300	539.3
49	3.0000	75000	49.000	.3500-02	.3000-02	.4000-02	.9119-04	.7552-04	.1018-03	.5700-01	.6090	539.3
49	3.0000	80000	50.000	.2700-02	.2200-02	.3000-02	.1225-03	.1015-03	.1018-03	.1600-01	.1990	540.3
49	3.0000	85000	51.000	.8000-03	.6000-03	.8000-03	.2589-04	.2143-04	.2889-04	.3500-01	.4370	541.0
49	3.0000	87500	52.000	.1700-02	.1400-02	.1900-02	.5681-04	.4702-04	.6340-04	.5300-01	.7390	541.7
49	3.0000	90000	53.000	.2500-02	.2100-02	.2800-02	.8565-04	.7088-04	.9561-04	.8700-01	1.147	541.7
49	3.0000	92500	54.000	.4100-02	.3400-02	.4600-02	.1413-03	.1169-03	.1577-03	.1010	1.021	541.7
49	3.0000	95000	55.000	.4800-02	.3900-02	.5300-02	.1626-03	.1346-03	.1815-03	.6070	8.117	552.8
49	4.0000	2000	71.000	.3430-01	.2830-01	.3843-01	.1173-02	.9690-03	.1113-02	.7140	7.098	550.6
49	4.0000	22500	72.000	.2910-01	.2400-01	.3250-01	.9951-03	.8215-03	.1113-02	.5810	6.793	549.1
49	4.0000	25000	73.000	.2740-01	.2290-01	.3100-01	.9467-03	.7835-03	.1060-02	.6070	7.469	549.0
49	4.0000	27500	74.000	.2900-01	.2390-01	.3240-01	.9912-03	.8187-03	.1108-02	.7220	9.447	547.8
49	4.0000	30000	75.000	.3450-01	.2850-01	.3650-01	.1178-02	.9732-03	.1366-02	.5800	7.585	547.1
49	4.0000	32500	76.000	.2760-01	.2280-01	.3090-01	.9442-03	.7803-03	.1055-02	.5390	7.053	546.3
49	4.0000	35000	77.000	.2560-01	.2120-01	.2860-01	.8764-03	.7244-03	.9782-03	.4740	6.210	544.5
49	4.0000	37500	78.000	.2250-01	.1860-01	.2510-01	.7688-03	.6357-03	.6586-03	.2530	3.321	542.2
49	4.0000	40000	79.000	.2250-01	.1860-01	.2510-01	.7688-03	.6357-03	.6586-03	.2530	3.321	542.2
49	4.0000	42500	80.000	.1200-01	.9900-02	.1340-01	.4092-03	.3386-03	.4568-03	.1610	2.117	541.1
49	4.0000	45000	81.000	.7600-02	.6300-02	.8500-02	.2602-03	.2154-03	.2904-03	.1610	2.117	541.1

DATE 07 OCT 75

OH-74 (AEDC V-18-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 1E3

OH-74 (AEDC V-18-B8A) B62C12F10M16W127E52VBR19

(RVB002)

RUN NUMBER	TRAJ.E	X/I.	T/C NO	H/H/EF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19TO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
49	4.0000	.45000	62.000	.5900-02	.4900-02	.6600-02	.2008-03	.1867-03	.2241-03	.1250	1.618	540.3
49	4.0000	.47500	63.000	.4500-02	.3700-02	.5000-02	.1540-03	.1275-03	.1719-03	.9600-01	1.220	539.9
49	4.0000	.50000	64.000	.3600-02	.3000-02	.4000-02	.1233-03	.1013-03	.1365-03	.7600-01	.9430	539.4
49	4.0000	.52500	65.000	.2400-02	.2000-02	.2700-02	.8242-04	.6825-04	.9196-04	.5100-01	.6360	539.3
49	4.0000	.55000	66.000	.2100-02	.1700-02	.2400-02	.7203-04	.5967-04	.8036-04	.4500-01	.5270	538.5
49	4.0000	.60000	67.000	.6000-03	.5000-03	.7000-03	.2028-04	.1680-04	.2262-04	.1300-01	.1430	538.0
49	4.0000	.65000	68.000	.1200-02	.1000-02	.1300-02	.4021-04	.3330-04	.4485-04	.2500-01	.2940	538.5
49	4.0000	.70000	69.000	.1500-02	.1300-02	.1700-02	.5280-04	.4372-04	.5891-04	.3300-01	.3660	539.7
49	4.0000	.75000	70.000	.2900-02	.2400-02	.3200-02	.9827-04	.8138-04	.1095-03	.6100-01	.6820	539.4
49	4.0000	.80000	75.000	.8000-03	.7000-03	.9000-03	.2638-04	.2350-04	.3167-04	.1800-01	.2130	540.2
49	4.0000	.85000	76.000	.2700-02	.2200-02	.3000-02	.9185-04	.7507-04	.1025-03	.5700-01	.6780	539.2
49	4.0000	.87500	77.000	.1100-02	.9000-03	.1300-02	.3865-04	.3200-04	.4313-04	.2400-01	.3150	540.3
49	4.0000	.90000	78.000	.1900-02	.1600-02	.2100-02	.6530-04	.5405-04	.7288-04	.4000-01	.5250	541.1
49	4.0000	.92500	79.000	.5600-02	.4600-02	.6200-02	.1501-03	.1573-03	.2122-03	.1180	1.459	541.7
49	4.0000	.95000	80.000	.5000-02	.4100-02	.5600-02	.1710-03	.1415-03	.1909-03	.1060	1.241	542.5

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 184

OH-74 (AEDC V41B-88A) 862C12F10M16W127E52V8R19

(RV8002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	FHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MJ LB-SEC /FT2
105	7.980	19.79	545.8	1311.	-174.3	1.000	95.40	.5700-01	2.533	3820.	.4995-04	.768+-07
RUN NUMBER	RN/L X10 6	HREF BTU/ R FT2SEC /FT	STN NO R=									
105	2.483	.3914-01	.0175 .2554-01									

TEST DATA

RUN NUMBER	T-ACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T0 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAH1 BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
105	1.0000	.27500	1.0000	.1450-01	.1200-01	.1623-01	.5669-03	.4695-03	.6325-03	.3580	3.707	547.7
105	1.0000	.30000	2.0000	.1230-01	.1020-01	.1370-01	.4820-03	.3993-03	.5377-03	.3050	3.232	547.0
105	1.0000	.32500	3.0000	.1020-01	.0400-02	.1140-01	.3988-03	.3305-03	.4448-03	.2530	2.593	546.1
105	1.0000	.35000	4.0000	.1000-01	.0300-02	.1200-01	.3929-03	.3255-03	.4382-02	.2490	2.576	546.3
105	1.0000	.37500	5.0000	.9800-02	.8100-02	.1090-01	.3819-03	.3164-03	.4259-03	.2420	2.541	546.0
105	1.0000	.40000	6.0000	.1190-01	.9800-02	.1320-01	.4648-03	.3851-03	.5184-03	.2950	3.022	546.0
105	1.0000	.42500	7.0000	.1110-01	.9200-02	.1230-01	.4326-03	.3584-03	.4826-03	.2740	2.835	546.6
105	1.0000	.45000	8.0000	.1260-01	.1040-01	.1400-01	.4920-03	.4076-03	.5486-03	.3120	3.179	546.7
105	1.0000	.47500	9.0000	.1920-01	.1590-01	.2060-01	.7234-03	.6227-03	.8380-03	.4750	4.828	547.5
105	1.0000	.50000	10.000	.1850-01	.1530-01	.2060-01	.7518-03	.5992-03	.8070-03	.4580	4.627	547.3
105	1.0000	.52500	11.000	.1810-01	.1500-01	.2020-01	.7093-03	.5876-03	.7913-03	.4490	4.537	547.3
105	1.0000	.55000	12.000	.1790-01	.1480-01	.1990-01	.6993-03	.5793-03	.7801-03	.4430	4.435	547.0
105	1.0000	.50000	13.000	.2160-01	.1790-01	.2410-01	.8445-03	.6992-03	.9423-03	.5330	5.384	548.8
105	1.0000	.65000	14.000	.2810-01	.2330-01	.3140-01	.1100-02	.9103-03	.1227-02	.6930	7.000	549.5
105	1.0000	.70000	15.000	.3750-01	.3100-01	.4180-01	.1466-02	.1213-02	.1636-02	.9220	8.980	550.8
105	1.0000	.75000	16.000	.5920-01	.4810-01	.6490-01	.2276-02	.1882-02	.2542-02	1.444	14.38	553.3
105	1.0000	.80000	17.000	.5920-01	.4890-01	.6620-01	.2317-02	.1914-02	.2589-02	1.444	13.90	556.6
105	2.0000	.28500	18.000	.1320-01	.1090-01	.1470-01	.5155-03	.4268-03	.5752-03	.3250	3.808	548.5
105	2.0000	.33700	19.000	.1200-01	.9900-02	.1330-01	.4683-03	.3980-03	.5225-03	.2960	3.488	547.1
105	2.0000	.39000	20.000	.1330-01	.1100-01	.1480-01	.5204-03	.4311-03	.5805-03	.3290	3.877	546.9
105	2.0000	.42600	21.000	.1640-01	.1360-01	.1830-01	.6437-03	.5331-03	.7181-03	.4070	4.763	547.6
105	2.0000	.47800	22.000	.2230-01	.1850-01	.2490-01	.8732-03	.7230-03	.9744-03	.5510	6.126	548.6

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF P-TAH	H1ST0 BTU/ R	H1T0 FT2SEC	H1TAH BTU/ R	QOOT BTU/ FT2SEC	OTMOT DEG. R	TH DEG. R
105	2.0000	.53000	23.000	.2810-01	.2320-01	.3130-01	.1048-02	.9087-03	.1226-02	.6910	7.673	550.5
105	2.0000	.56700	24.000	.3270-01	.2710-01	.3650-01	.1280-02	.1059-02	.1429-02	.8050	8.718	550.8
105	2.0000	.62000	25.000	.5240-01	.4330-01	.5850-01	.2050-02	.1695-02	.2290-02	1.293	13.87	554.1
105	2.0000	.67000	26.000	.6930-01	.5720-01	.7740-01	.2712-02	.2240-02	.3031-02	1.688	18.22	557.5
105	2.0000	.70500	27.000	.5080-01	.4200-01	.5680-01	.1990-02	.1645-02	.2223-02	1.245	13.33	554.5
105	2.0000	.75000	28.000	.2570-01	.2130-01	.2870-01	.1006-02	.8328-03	.1123-02	.6340	6.944	549.3
105	2.0000	.80000	29.000	.1970-01	.1630-01	.2200-01	.7706-03	.6381-03	.8599-03	.4870	5.354	548.5
105	2.0000	.82400	30.000	.7200-02	.6000-02	.8100-02	.2834-03	.2347-03	.3162-03	.1790	2.490	547.6
105	3.0000	.20000	31.000	.3020-01	.2500-01	.3380-01	.1183-02	.9788-03	.1322-02	.7410	7.830	553.3
105	3.0000	.22500	32.000	.2360-01	.1980-01	.2640-01	.9245-03	.7695-03	.1034-02	.8900	8.470	552.7
105	3.0000	.25000	33.000	.1830-01	.1510-01	.2040-01	.7153-03	.5920-03	.7984-03	.4500	5.025	550.4
105	3.0000	.27500	34.000	.1410-01	.1160-01	.1570-01	.5505-03	.4459-03	.6143-03	.3480	4.153	548.6
105	3.0000	.30000	35.000	.1230-01	.1020-01	.1370-01	.4804-03	.3978-03	.5359-03	.3040	3.751	547.8
105	3.0000	.32500	36.000	.1320-01	.1090-01	.1470-01	.5154-03	.4269-03	.5750-03	.3260	3.815	547.5
105	3.0000	.35000	37.000	.1380-01	.1140-01	.1540-01	.5360-03	.4484-03	.6013-03	.3410	3.948	547.5
105	3.0000	.37500	38.000	.1350-01	.1120-01	.1510-01	.5286-03	.4379-03	.5897-03	.3350	3.918	548.9
105	3.0000	.40000	39.000	.2080-01	.1720-01	.2320-01	.8132-03	.6735-03	.9072-03	.5140	6.046	547.9
105	3.0000	.42500	40.000	.2710-01	.2240-01	.3130-01	.1060-02	.8772-03	.1183-02	.6680	7.891	549.7
105	3.0000	.45000	41.000	.2800-01	.2320-01	.3130-01	.1097-02	.9080-03	.1224-02	.6910	7.878	549.5
105	3.0000	.47500	42.000	.2920-01	.2410-01	.3250-01	.1141-02	.9447-03	.1274-02	.7190	7.988	549.7
105	3.0000	.50000	43.000	.3640-01	.3020-01	.4070-01	.1426-02	.1180-02	.1593-02	.8960	9.943	551.7
105	3.0000	.52500	44.000	.4760-01	.3930-01	.5310-01	.1862-02	.1540-02	.2079-02	1.168	13.63	552.7
105	3.0000	.55000	45.000	.6400-01	.5290-01	.7150-01	.2506-02	.2072-02	.2800-02	1.565	17.34	555.4
105	3.0000	.60000	46.000	.7030-01	.5810-01	.7850-01	.2751-02	.2273-02	.3074-02	1.715	18.52	556.6
105	3.0000	.65000	47.000	.2990-01	.2470-01	.3330-01	.1168-02	.9674-03	.1304-02	.7370	7.797	549.2
105	3.0000	.70000	48.000	.1680-01	.1390-01	.1880-01	.6586-03	.5455-03	.7348-03	.4160	4.583	547.8
105	3.0000	.75000	49.000	.1230-01	.1020-01	.1380-01	.4832-03	.4002-03	.5391-03	.3060	3.315	547.5
105	3.0000	.80000	50.000	.1080-01	.8900-02	.1200-01	.4208-03	.3486-03	.4695-03	.2660	2.848	547.4
105	3.0000	.85000	51.000	.1290-01	.1070-01	.1440-01	.5058-03	.4188-03	.5644-03	.3190	3.941	548.9
105	3.0000	.87500	52.000	.3090-01	.2560-01	.3450-01	.1210-02	.1000-02	.1351-02	.7580	9.341	553.1
105	3.0000	.90000	53.000	.1590-01	.1310-01	.1770-01	.6218-03	.5142-03	.6940-03	.3900	5.411	552.1
105	3.0000	.92500	54.000	.1200-01	.9900-02	.1340-01	.4706-03	.3894-03	.5254-03	.2960	3.864	551.2
105	3.0000	.95000	55.000	.1370-01	.1140-01	.1530-01	.5373-03	.4446-03	.5997-03	.3390	3.412	550.7
105	4.0000	.20000	71.000	.3810-01	.3140-01	.4260-01	.1490-02	.1230-02	.1666-02	.9260	10.51	558.1
105	4.0000	.22500	72.000	.3020-01	.2500-01	.3370-01	.1182-02	.9768-03	.1320-02	.7390	8.612	555.0
105	4.0000	.25000	73.000	.2140-01	.1770-01	.2390-01	.8374-03	.6926-03	.9351-03	.5250	6.131	552.7
105	4.0000	.27500	74.000	.1740-01	.1440-01	.1940-01	.6802-03	.5629-03	.7594-03	.4280	5.275	551.1
105	4.0000	.30000	75.000	.1430-01	.1180-01	.1600-01	.6139-03	.5142-03	.6270-03	.3530	4.620	548.9
105	4.0000	.32500	76.000	.1590-01	.1310-01	.1770-01	.6208-03	.5140-03	.6927-03	.3920	5.121	548.9
105	4.0000	.35000	77.000	.2530-01	.2100-01	.2830-01	.9910-03	.8202-03	.1106-02	.6240	8.149	550.4
105	4.0000	.37500	78.000	.3900-01	.3230-01	.4350-01	.1526-02	.1263-02	.1704-02	.9580	12.51	552.1
105	4.0000	.40000	79.000	.5180-01	.4280-01	.5790-01	.2028-02	.1677-02	.2666-02	1.269	16.55	554.2
105	4.0000	.42500	81.000	.6780-01	.5600-01	.7580-01	.2653-02	.2192-02	.2965-02	1.652	21.51	557.1

DATE 07 OCT 75

OM-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 186

OM-74 (AEDC V41B-88A) 882C12F10H18H127E52V8R19

(RV8002)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9T) BTU/ R F12SEC	H(10) BTU/ R F12SEC	H(TAN) BTU/ R F12SEC	QDOT BTU/ F12SEC	DTMDT DEG. R /SEC	TW DEG. R
105	4.0000	.45000	62.000	.8460-01	.6980-01	.9460-01	.3311-02	.2731-02	.3703-03	2.046	28.26	562.0
105	4.0000	.47500	63.000	.7340-01	.6050-01	.8210-01	.2871-02	.2368-02	.3212-02	1.773	32.36	562.4
105	4.0000	.50000	64.000	.4550-01	.3770-01	.5090-01	.1783-02	.1474-02	.1951-02	1.115	12.74	554.2
105	4.0000	.52500	65.000	.2970-01	.2460-01	.3310-01	.1162-02	.9619-03	.1298-02	.7310	9.020	550.6
105	4.0000	.55000	66.000	.1990-01	.1650-01	.2220-01	.7780-03	.6441-03	.8682-03	.4910	5.738	549.2
105	4.0000	.60000	67.000	.1380-01	.1140-01	.1540-01	.5409-03	.4480-03	.6035-03	.3420	3.840	547.7
105	4.0000	.65000	68.000	.1120-01	.9300-02	.1250-01	.4403-03	.3847-03	.4912-03	.2790	3.261	547.2
105	4.0000	.70000	69.000	.8000-02	.6600-02	.8900-02	.3125-03	.2589-03	.3486-03	.1980	2.199	547.2
105	4.0000	.75000	70.000	.7300-02	.6000-02	.8100-02	.2839-03	.2352-03	.3167-03	.1800	1.997	547.3
105	4.0000	.80000	75.000	.3000-02	.2500-02	.3300-02	.1165-03	.9682-04	.1300-03	.7400-01	.8860	547.4
105	4.0000	.85000	76.000	.4600-02	.3900-02	.5200-02	.1812-03	.1501-03	.2021-03	.1150	1.358	546.8
105	4.0000	.87500	77.000	.6100-02	.5000-02	.6800-02	.2377-03	.1969-03	.2653-03	.1500	1.962	548.6
105	4.0000	.90000	78.000	.1620-01	.1340-01	.1800-01	.6322-03	.5230-03	.7058-03	.3970	5.126	551.5
105	4.0000	.92500	79.000	.1440-01	.1190-01	.1610-01	.5643-03	.4663-03	.6300-03	.3550	4.375	551.3
105	4.0000	.95000	80.000	.4600-02	.3800-02	.5100-02	.1795-03	.1486-03	.2003-03	.1130	1.324	549.2

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RV8002)

OH-74 (AEDC V41B-B8A) B62C12F10M16M127E32V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
106	7.980	24.92	547.7	1313.	-168.7	1.000	95.60	.5700-01	2.542	3823.	.5004-04	.7696-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC /FT	STN NO R= .0175 .2561-01
106	2.486	.3922-01	.2561-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT ² SEC	H1T01 BTU/ R FT ² SEC	H1TAW BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTWOT DEG. R /SEC	TW DEG. R
106	1.0000	.27500	1.0000	.1510-01	.1250-01	.1680-01	.5910-03	.4898-03	.6590-03	.3760	3.890	545.8
106	1.0000	.30000	2.0000	.1290-01	.1070-01	.1440-01	.5069-03	.4202-03	.5652-03	.3230	3.421	545.2
106	1.0000	.32500	3.0000	.1110-01	.0920-02	.1240-01	.4355-03	.3611-03	.4855-03	.2780	2.849	544.4
106	1.0000	.35000	4.0000	.1210-01	.1000-01	.1340-01	.4727-03	.3919-03	.5270-03	.3010	3.119	544.7
106	1.0000	.37500	5.0000	.1170-01	.0970-02	.1300-01	.4579-03	.3797-03	.5106-03	.2920	3.064	544.8
106	1.0000	.40000	6.0000	.1220-01	.1010-01	.1360-01	.4790-03	.3971-03	.5340-03	.3050	3.132	544.6
106	1.0000	.42500	7.0000	.1700-01	.1410-01	.1890-01	.6653-03	.5515-03	.7420-03	.4230	4.379	546.0
106	1.0000	.45000	8.0000	.1970-01	.1630-01	.2200-01	.7729-03	.6405-03	.8620-03	.4910	5.012	546.4
106	1.0000	.47500	9.0000	.1910-01	.1580-01	.2130-01	.7473-03	.6193-03	.8335-03	.4750	4.820	546.7
106	1.0000	.50000	10.000	.2000-01	.1660-01	.2230-01	.7849-03	.6504-03	.8754-03	.4980	5.039	546.8
106	1.0000	.52500	11.000	.2330-01	.1930-01	.2590-01	.9122-03	.7557-03	.1018-02	.5780	5.847	547.5
106	1.0000	.55000	12.000	.2420-01	.2000-01	.2700-01	.9484-03	.7857-03	.1058-02	.6010	6.023	547.7
106	1.0000	.60000	13.000	.3700-01	.3060-01	.4130-01	.1450-02	.1200-02	.1618-02	.9150	9.239	550.4
106	1.0000	.65000	14.000	.7490-01	.6190-01	.8373-01	.2938-02	.2429-02	.3282-02	1.841	18.54	555.2
106	1.0000	.70000	15.000	.4260-01	.3530-01	.4760-01	.1672-02	.1383-02	.1867-02	1.052	10.23	552.6
106	1.0000	.75000	16.000	.2220-01	.1840-01	.2470-01	.8695-03	.7200-03	.9703-03	.5500	5.552	549.5
106	1.0000	.80000	17.000	.1430-01	.1180-01	.1590-01	.5591-03	.4629-03	.6239-03	.3530	3.413	549.7
106	2.0000	.26500	18.000	.1490-01	.1240-01	.1670-01	.5862-03	.4859-03	.6537-03	.3730	4.367	545.8
106	2.0000	.33700	19.000	.1380-01	.1140-01	.1540-01	.5404-03	.4480-03	.6025-03	.3440	4.053	545.0
106	2.0000	.39000	20.000	.1950-01	.1610-01	.2170-01	.7629-03	.6323-03	.8507-03	.4850	5.713	545.8
106	2.0000	.42600	21.000	.2520-01	.2090-01	.2820-01	.9903-03	.8204-03	.1105-02	.6280	7.348	547.7
106	2.0000	.47800	22.000	.3060-01	.2540-01	.3420-01	.1202-02	.9956-03	.1341-02	.7620	8.468	547.9

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 188

OH-74 (AEDC V41B-B8A) 862C12F10H16M127E52V8R19

(RV8002)

RUN NUMBER	TRA/E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TM DEG. R
106	2.0000	.53000	23.000	.5650-01	.4670-01	.6300-01	.2214-02	.1831-02	.2472-02	1.391	15.42	553.4
106	2.0000	.56700	24.000	.8770-01	.7240-01	.9800-01	.3439-02	.2839-02	.3844-02	2.139	23.07	559.5
106	2.0000	.62000	25.000	.4140-01	.3430-01	.4630-01	.1625-02	.1345-02	.1814-02	1.024	11.09	551.5
106	2.0000	.67000	26.000	.1930-01	.1600-01	.2160-01	.7599-03	.6286-03	.8466-03	.4810	5.213	548.2
106	2.0000	.70500	27.000	.1410-01	.1170-01	.1570-01	.5526-03	.4578-03	.6164-03	.3500	3.764	547.6
106	2.0000	.75000	28.000	.9900-02	.8200-02	.1100-01	.3880-03	.3215-03	.4327-03	.2470	2.702	546.3
106	2.0000	.80000	29.000	.8700-02	.7200-02	.9700-02	.3398-03	.2816-03	.3790-03	.2160	2.375	547.0
106	2.0000	.82400	30.000	.3500-02	.2900-02	.3900-02	.1385-03	.1147-03	.1545-03	.8800-01	1.218	548.4
106	3.0000	.82400	31.000	.3230-01	.2670-01	.3600-01	.1266-02	.1048-02	.1414-02	.7970	8.417	552.5
106	3.0000	.82500	32.000	.2670-01	.2210-01	.2980-01	.1047-02	.0863-03	.1168-02	.6600	7.357	551.5
106	3.0000	.85000	33.000	.2080-01	.1720-01	.2320-01	.8167-03	.6765-03	.9112-03	.5170	5.779	548.3
106	3.0000	.87500	34.000	.1590-01	.1320-01	.1770-01	.6229-03	.5162-03	.6947-03	.3960	4.735	546.3
106	3.0000	.90000	35.000	.1420-01	.1170-01	.1580-01	.5552-03	.4603-03	.6191-03	.3530	4.372	545.1
106	3.0000	.92500	36.000	.1540-01	.1280-01	.1720-01	.6042-03	.5009-03	.6737-03	.3850	4.508	545.1
106	3.0000	.95000	37.000	.1560-01	.1290-01	.1740-01	.6126-03	.5079-03	.6830-03	.3900	4.525	544.9
106	3.0000	.97500	38.000	.2630-01	.2180-01	.2930-01	.1032-02	.0850-03	.1151-02	.6550	7.667	547.1
106	3.0000	.40000	39.000	.3300-01	.2730-01	.3680-01	.1293-02	.1071-02	.1443-02	.8200	9.652	547.5
106	3.0000	.42500	40.000	.3880-01	.3210-01	.4330-01	.1522-02	.1260-02	.1698-02	.9610	11.36	550.1
106	3.0000	.45000	41.000	.5170-01	.4280-01	.5770-01	.2073-02	.1678-02	.2262-02	1.279	14.56	550.7
106	3.0000	.47500	42.000	.7020-01	.5800-01	.7840-01	.2753-02	.2276-02	.3075-02	1.724	19.09	555.5
106	3.0000	.50000	43.000	.7480-01	.6180-01	.8360-01	.2934-02	.2424-02	.3280-02	1.829	20.23	558.3
106	3.0000	.52500	44.000	.4650-01	.3950-01	.5190-01	.1825-02	.1510-02	.2037-02	1.151	13.45	551.0
106	3.0000	.55000	45.000	.3030-01	.2510-01	.3380-01	.1189-02	.0949-03	.1327-02	.7530	8.365	548.7
106	3.0000	.58000	46.000	.1590-01	.1320-01	.1770-01	.6242-03	.5173-03	.6961-03	.3960	4.303	546.6
106	3.0000	.65000	47.000	.1090-01	.9100-02	.1220-01	.4291-03	.3557-03	.4785-03	.2730	2.891	546.0
106	3.0000	.70000	48.000	.7700-02	.6400-02	.8600-02	.3036-03	.2517-03	.3386-03	.1930	2.129	545.4
106	3.0000	.75000	49.000	.5900-02	.4900-02	.6500-02	.2302-03	.1908-03	.2567-03	.1460	1.590	545.6
106	3.0000	.80000	50.000	.3600-02	.3000-02	.4000-02	.1405-03	.1185-03	.1567-03	.8900-01	.9560	546.0
106	3.0000	.85000	51.000	.4700-02	.3900-02	.5200-02	.1837-03	.1521-03	.2049-03	.1160	1.436	548.6
106	3.0000	.87500	52.000	.1000-01	.8300-02	.1120-01	.3939-03	.3261-03	.4396-03	.2490	3.069	550.2
106	3.0000	.90000	53.000	.1810-01	.1500-01	.2020-01	.7106-03	.5879-03	.7934-03	.4470	6.197	552.7
106	3.0000	.92500	54.000	.2490-01	.2060-01	.2780-01	.9770-03	.8080-03	.1091-02	.6130	7.995	554.1
106	3.0000	.95000	55.000	.2440-01	.2020-01	.2720-01	.9554-03	.7905-03	.1067-02	.6010	6.065	552.3
106	4.0000	.20000	71.000	.3980-01	.3280-01	.4440-01	.1559-02	.1288-02	.1743-02	.9730	11.04	557.5
106	4.0000	.22500	72.000	.3040-01	.2510-01	.3390-01	.1191-02	.0980-03	.1330-02	.7480	8.732	553.4
106	4.0000	.25000	73.000	.2350-01	.1950-01	.2630-01	.9228-03	.7636-03	.1030-02	.5810	6.788	551.9
106	4.0000	.27500	74.000	.1930-01	.1600-01	.2160-01	.7575-03	.6271-03	.8453-03	.4790	5.907	549.8
106	4.0000	.30000	75.000	.1630-01	.1350-01	.1810-01	.6377-03	.5284-03	.713-03	.4050	5.295	547.1
106	4.0000	.32500	76.000	.2780-01	.2300-01	.3100-01	.1091-02	.0937-03	.1218-02	.6900	9.026	548.9
106	4.0000	.35000	77.000	.4700-01	.3890-01	.5240-01	.1842-02	.1524-02	.2057-02	1.158	15.11	553.0
106	4.0000	.37500	78.000	.7240-01	.5990-01	.8090-01	.2841-02	.2348-02	.3174-02	1.776	23.12	556.7
106	4.0000	.40000	80.000	.5930-01	.4910-01	.6630-01	.2327-02	.1924-02	.2599-02	1.459	19.03	554.5
06	4.0000	.42500	61.000	.3510-01	.2910-01	.3920-01	.1378-02	.1141-02	.1538-02	.8710	11.38	549.8

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITTER FUSELAGE PORT SIDE

PAGE 189

OH-74 (AEDC V41B-88A) B62C12F10M16W127E52V8R19

(RV8002)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1(OT) BTU/ R FT2SEC	H1(TO) BTU/ R FT2SEC	H1(TAW) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TM DEG. R
106	4.0000	.45000	62.000	.2040-01	.1690-01	.2270-01	.7996-03	.6623-03	.8918-03	.5070	6.554	547.6
106	4.0000	.47500	63.000	.1540-01	.1280-01	.1720-01	.6056-03	.5018-03	.6795-03	.3840	4.888	546.9
106	4.0000	.50000	64.000	.1100-01	.9100-02	.1230-01	.4310-03	.3572-03	.4806-03	.2740	3.386	546.2
106	4.0000	.52500	65.000	.9100-02	.7500-02	.1020-01	.3572-03	.2961-03	.3984-03	.2270	2.808	546.0
106	4.0000	.55000	66.000	.7300-02	.6000-02	.8100-02	.2851-03	.2353-03	.3179-03	.1810	2.125	545.6
106	4.0000	.60000	67.000	.5900-02	.4900-02	.6500-02	.2298-03	.1905-03	.2553-03	.1460	1.644	545.4
106	4.0000	.65000	68.000	.4800-02	.4000-02	.5300-02	.1881-03	.1559-03	.2098-03	.1200	1.403	545.3
106	4.0000	.70000	69.000	.2400-02	.2000-02	.2700-02	.9453-04	.7837-04	.1054-03	.6000-01	.6700	544.9
106	4.0000	.75000	70.000	.2100-02	.1800-02	.2400-02	.8357-04	.6929-04	.9318-04	.5300-01	.5920	545.0
106	4.0000	.80000	75.000	.1500-02	.1200-02	.1600-02	.5721-04	.4742-04	.6380-04	.3600-01	.4380	546.0
106	4.0000	.85000	76.000	.1000-02	.8000-03	.1100-02	.3769-04	.3123-04	.4203-04	.2400-01	.2830	546.3
106	4.0000	.87500	77.000	.2200-02	.1800-02	.2500-02	.8673-04	.7186-04	.9674-04	.5500-01	.7200	547.2
106	4.0000	.90000	78.000	.6700-02	.5500-02	.7500-02	.2624-03	.2173-03	.2928-03	.1660	2.147	548.6
106	4.0000	.92500	79.000	.8300-02	.6900-02	.9200-02	.3249-03	.2690-03	.3626-03	.2050	2.535	549.6
106	4.0000	.95000	80.000	.9600-02	.7900-02	.1073-01	.3748-03	.3104-03	.4183-03	.2370	2.769	549.8

OH-74 (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

(RVB002)

OH-74 (AEDC V418-88A) B62C12F10M18H127E32V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
107	7.980	29.83	546.7	1313.	-90.00	1.000	95.60	.5700-01	2.537	3823.	.4995-04	.7696-07

RUN NUMBER	RN/L X10.6 /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175 .2564-01
107	2.481	.3918-01	

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT ² SEC	H1T01 BTU/ R FT ² SEC	H1TAW BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTWOT DEG. R /SEC	TM DEG. R
107	1.0000	.27500	1.0000	.1490-01	.1240-01	.1660-01	.5849-03	.4846-03	.6521-03	.3710	3.840	547.1
107	1.0000	.30000	2.0000	.1290-01	.1070-01	.1440-01	.5067-03	.4199-03	.5662-03	.3220	3.410	546.6
107	1.0000	.32500	3.0000	.1170-01	.0970-02	.1300-01	.4576-03	.3793-03	.5103-03	.2910	2.984	545.8
107	1.0000	.35000	4.0000	.1240-01	.1030-01	.1380-01	.4850-03	.4020-03	.5409-03	.3080	3.190	546.3
107	1.0000	.37500	5.0000	.1190-01	.0900-02	.1320-01	.4644-03	.3849-03	.5179-03	.2950	3.100	545.9
107	1.0000	.40000	6.0000	.1960-01	.1620-01	.2180-01	.7681-03	.6349-03	.8544-03	.4870	4.989	546.6
107	1.0000	.42500	7.0000	.1930-01	.1600-01	.2150-01	.7544-03	.6251-03	.8419-03	.4790	4.950	547.4
107	1.0000	.45000	8.0000	.2250-01	.1800-01	.2510-01	.8812-03	.7300-03	.9831-03	.5580	5.696	547.9
107	1.0000	.47500	9.0000	.1930-01	.1600-01	.2150-01	.7557-03	.6262-03	.8429-03	.4800	4.872	547.0
107	1.0000	.50000	10.000	.2400-01	.1900-01	.2680-01	.9412-03	.7797-03	.1050-02	.5970	6.030	547.8
107	1.0000	.52500	11.000	.3160-01	.2620-01	.3530-01	.1239-02	.1025-02	.1382-02	.7830	7.307	548.5
107	1.0000	.55000	12.000	.3360-01	.2780-01	.3750-01	.1317-02	.1091-02	.1469-02	.8340	8.346	548.7
107	1.0000	.60000	13.000	.4480-01	.3710-01	.5000-01	.1755-02	.1452-02	.1960-02	1.103	11.12	553.3
107	1.0000	.65000	14.000	.2800-01	.2320-01	.3120-01	.1096-02	.9073-03	.1223-02	.6920	6.991	549.9
107	1.0000	.70000	15.000	.2610-01	.2160-01	.2910-01	.1022-02	.8462-03	.1141-02	.6450	6.288	550.1
107	1.0000	.75000	16.000	.1560-01	.1290-01	.1740-01	.6101-03	.5053-03	.6807-03	.3860	3.902	548.6
107	1.0000	.80000	17.000	.9300-02	.7700-02	.1040-01	.3646-03	.3020-03	.4069-03	.2310	2.230	548.7
107	2.0000	.28500	18.000	.1550-01	.1290-01	.1730-01	.6083-03	.5039-03	.6796-03	.3860	4.512	547.9
107	2.0000	.33700	19.000	.1400-01	.1160-01	.1570-01	.5500-03	.4557-03	.6133-03	.3490	4.112	546.5
107	2.0000	.39000	20.000	.2670-01	.2210-01	.2980-01	.1046-02	.8666-03	.1167-02	.6620	7.790	548.7
107	2.0000	.42600	21.000	.3340-01	.2770-01	.3730-01	.1310-02	.1084-02	.1462-02	.8270	9.669	550.2
107	2.0000	.47800	22.000	.4840-01	.4000-01	.5400-01	.1895-02	.1568-02	.2115-02	1.193	13.24	552.0

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 191

OH-74 (AEDC V41B-BBA) 862C12F10M16H127E52V8R19

(RV8002)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAM	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	QDOT DEG. R /SEC	TH DEG. R
107	2.0000	.53000	23.000	.4050-01	.3350-01	.4520-01	.1586-02	.1312-02	.1771-02	.9990	11.08	552.0
107	2.0000	.56700	24.000	.2830-01	.2340-01	.3150-01	.1108-02	.9700-03	.1236-02	.7000	7.584	545.8
107	2.0000	.62000	25.000	.1770-01	.1470-01	.1980-01	.6940-03	.5749-03	.7743-03	.4400	4.767	548.3
107	2.0000	.67000	26.000	.1170-01	.9700-02	.1300-01	.4574-03	.3790-03	.5101-03	.2900	3.151	546.8
107	2.0000	.70500	27.000	.9600-02	.7900-02	.1070-01	.3751-03	.3108-03	.4183-03	.2380	2.562	548.4
107	2.0000	.75000	28.000	.7700-02	.6400-02	.8800-02	.3012-03	.2498-03	.3399-03	.1910	2.099	548.1
107	2.0000	.80000	29.000	.4800-02	.3900-02	.5300-02	.1894-03	.1545-03	.2078-03	.1160	1.304	548.7
107	2.0000	.82400	30.000	.6000-03	.5000-03	.7000-03	.2443-04	.2025-04	.2725-04	.1600-01	.2160	548.3
107	3.0000	.20000	31.000	.3280-01	.2710-01	.3670-01	.1286-02	.1063-02	.1436-02	.8060	8.510	554.6
107	3.0000	.22500	32.000	.2840-01	.2350-01	.3180-01	.1114-02	.9216-03	.1244-02	.7000	7.797	553.6
107	3.0000	.25000	33.000	.2280-01	.1890-01	.2550-01	.8941-03	.7401-03	.9979-03	.5640	6.295	550.7
107	3.0000	.27500	34.000	.1680-01	.1400-01	.1880-01	.6601-03	.5468-03	.7364-03	.4180	4.999	548.2
107	3.0000	.30000	35.000	.1540-01	.1280-01	.1720-01	.6046-03	.5011-03	.6743-03	.3840	4.498	546.4
107	3.0000	.32500	36.000	.2490-01	.2060-01	.2780-01	.9747-03	.8073-03	.1087-02	.6170	7.147	548.4
107	3.0000	.35000	37.000	.3500-01	.2900-01	.3910-01	.1371-02	.1136-02	.1530-02	.8670	10.14	549.2
107	3.0000	.40000	38.000	.3870-01	.3200-01	.4310-01	.1515-02	.1254-02	.1690-02	.9570	11.25	549.8
107	3.0000	.42500	39.000	.3570-01	.2960-01	.3990-01	.1401-02	.1159-02	.1563-02	.8830	10.43	551.1
107	3.0000	.45000	40.000	.4890-01	.4040-01	.5460-01	.1915-02	.1589-02	.2138-02	1.206	13.72	552.1
107	3.0000	.47500	41.000	.3400-01	.2810-01	.3790-01	.1332-02	.1103-02	.1487-02	.8420	9.351	549.7
107	3.0000	.50000	42.000	.2470-01	.2040-01	.2750-01	.9666-03	.8004-03	.1079-02	.6110	6.793	549.2
107	3.0000	.52500	43.000	.1740-01	.1440-01	.1940-01	.6832-03	.5661-03	.7620-03	.4340	5.078	546.9
107	3.0000	.55000	44.000	.1420-01	.1180-01	.1590-01	.5582-03	.4626-03	.6226-03	.3540	3.942	546.8
107	3.0000	.60000	46.000	.8900-02	.7400-02	.9900-02	.3484-03	.2888-03	.3885-03	.2220	2.407	545.5
107	3.0000	.65000	47.000	.6000-02	.5000-02	.6700-02	.2357-03	.1954-03	.2628-03	.1500	1.590	545.4
107	3.0000	.70000	48.000	.4800-02	.4000-02	.5300-02	.1871-03	.1551-03	.2086-03	.1190	1.312	545.3
107	3.0000	.75000	49.000	.3100-02	.2600-02	.3500-02	.1229-03	.1018-03	.1370-03	.7800-01	.8490	545.4
107	3.0000	.80000	50.000	.1400-02	.1100-02	.1500-02	.5312-04	.4403-04	.5923-04	.3400-01	.3620	545.5
107	3.0000	.85000	51.000	.2300-02	.1900-02	.2500-02	.5534-04	.4584-04	.6175-04	.3500-01	.4330	548.6
107	3.0000	.87500	52.000	.1800-02	.1500-02	.2000-02	.8932-04	.7396-04	.9967-04	.5600-01	.5970	549.4
107	3.0000	.90000	53.000	.1800-02	.1500-02	.2000-02	.7080-04	.5862-04	.7901-04	.4500-01	.6210	550.1
107	3.0000	.95000	55.000	.2900-02	.2400-02	.3300-02	.1151-03	.9535-04	.1285-03	.7300-01	.7360	549.2
107	4.0000	.20000	71.000	.4310-01	.3560-01	.4820-01	.1688-02	.1394-02	.1888-02	1.049	11.88	550.5
107	4.0000	.22500	72.000	.3040-01	.2520-01	.3400-01	.1193-02	.9864-03	.1333-02	.7480	8.722	554.8
107	4.0000	.25000	73.000	.2320-01	.1920-01	.2590-01	.9093-03	.7523-03	.1015-02	.5720	6.634	552.2
107	4.0000	.27500	74.000	.2260-01	.1870-01	.2520-01	.8847-03	.7323-03	.9875-03	.5580	6.882	551.0
107	4.0000	.30000	76.000	.2060-01	.1700-01	.2300-01	.8061-03	.6675-03	.8994-03	.5100	6.664	549.2
107	4.0000	.32500	57.000	.3990-01	.3300-01	.4450-01	.1562-02	.1292-02	.1745-02	.9820	12.61	553.3
107	4.0000	.35000	58.000	.5000-01	.4130-01	.5580-01	.1958-02	.1618-02	.2188-02	1.224	15.93	556.9
107	4.0000	.37500	59.000	.3280-01	.2710-01	.3660-01	.1284-02	.1063-02	.1433-02	.8110	10.59	550.4
107	4.0000	.40000	60.000	.2250-01	.1870-01	.2510-01	.8831-03	.7312-03	.9834-03	.5580	7.298	549.4
107	4.0000	.42500	61.000	.1610-01	.1330-01	.1790-01	.6296-03	.5215-03	.7022-03	.3990	5.223	547.5
107	4.0000	.45000	62.000	.1050-01	.8700-02	.1180-01	.4130-03	.3422-03	.4606-03	.2620	3.393	546.5

(RVB002)

OH-7N (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-7N (AEDC V418-B8A) 862C12F10M16W127E32V8R19

DATE 07 OCT 75

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(1970) BTU/ R F12SEC	H(101) BTU/ R F12SEC	H(1AH) BTU/ R F12SEC	QDOT BTU/ F12SEC	DTWOT DEG. R /SEC	TH DEG. R
107	4.0000	.47500	63.000	.7700-02	.6400-02	.8600-02	.3026-03	.2508-03	.3374-03	.1920	2.446	546.0
107	4.0000	.50000	64.000	.5800-02	.4800-02	.6500-02	.2291-03	.1839-03	.2555-03	.1460	1.804	545.3
107	4.0000	.52500	65.000	.5100-02	.4200-02	.5600-02	.1981-03	.1642-03	.2208-03	.1260	1.560	545.0
107	4.0000	.55000	66.000	.4400-02	.3700-02	.4900-02	.1731-03	.1436-03	.1930-03	.1100	1.294	544.2
107	4.0000	.60000	67.000	.3800-02	.3100-02	.4200-02	.1484-03	.1231-03	.1654-03	.9500-01	1.065	543.7
107	4.0000	.65000	68.000	.2100-02	.1700-02	.2300-02	.8115-04	.6729-04	.9046-04	.5200-01	.6070	544.0
107	4.0000	.70000	69.000	.9000-03	.8000-03	.1000-02	.3613-04	.3001-04	.4034-04	.2300-01	.2570	543.9
107	4.0000	.75000	70.000	.1000-02	.8000-03	.1100-02	.3755-04	.3114-04	.4186-04	.2400-01	.2670	544.5
107	4.0000	.80000	75.000	.7000-03	.6000-03	.7000-03	.2616-04	.2159-04	.2916-04	.1700-01	.2016	544.8
107	4.0000	.85000	76.000	.2300-02	.1900-02	.2600-02	.9162-04	.7596-04	.1021-03	.5800-01	.6910	546.0
107	4.0000	.87500	77.000	.1600-02	.1300-02	.1800-02	.6255-04	.5185-04	.6976-04	.4000-01	.5210	546.9
107	4.0000	.90000	78.000	.1800-02	.1500-02	.2000-02	.7143-04	.5919-04	.7967-04	.4500-01	.5860	547.4
107	4.0000	.92500	79.000	.2800-02	.2300-02	.3100-02	.1098-03	.9099-04	.1225-03	.7000-01	.8610	549.8
107	4.0000	.95000	80.000	.9600-02	.7900-02	.1070-01	.3748-03	.3104-03	.4183-03	.2370	2.769	

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITTER FUSELAGE PORT SIDE

04-74 (AEDC V41B-88A) B62C12F10M16H127E52V8R19 (RV8002)

ORBITTER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
108	7.980	34.89	547.2	1310.	168.8	1.000	95.40	.5700-01	2.539	3819.	.5011-04	.7678-07
RUN NUMBER	RM/L X10 6	HREF BTU/ R FT2SEC	STN NO R=									
108	2.492	.3919-01	.0175									
			.2559-01									

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H1GTO1 BTU/ R FT2SEC	H1TO1 BTU/ R FT2SEC	H1TAM1 BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TM DEG. R
108	1.0000	.27500	1.0000	.1520-01	.1260-01	.1690-01	.5940-03	.4920-03	.6628-03	.3750	3.881	547.5
108	1.0000	.30000	2.0000	.1430-01	.1190-01	.1600-01	.5609-03	.4645-03	.6258-03	.3540	3.750	547.6
108	1.0000	.32500	3.0000	.1240-01	.1030-01	.1390-01	.4870-03	.4035-03	.5432-03	.3080	3.160	546.2
108	1.0000	.35000	4.0000	.1360-01	.1120-01	.1510-01	.5312-03	.4401-03	.5925-03	.3360	3.479	546.3
108	1.0000	.37500	5.0000	.1880-01	.1550-01	.2090-01	.7349-03	.6088-03	.8199-03	.4650	4.878	546.5
108	1.0000	.40000	6.0000	.2230-01	.1850-01	.2490-01	.8756-03	.7252-03	.9769-03	.5530	5.671	547.2
108	1.0000	.42500	7.0000	.1880-01	.1550-01	.2090-01	.7354-03	.6091-03	.8204-03	.4650	4.809	546.9
108	1.0000	.45000	8.0000	.2000-01	.1650-01	.2230-01	.7823-03	.6480-03	.8727-03	.4950	5.048	546.7
108	1.0000	.47500	9.0000	.2740-01	.2270-01	.3060-01	.1075-02	.8898-03	.1199-02	.6780	6.881	548.2
108	1.0000	.50000	10.000	.2430-01	.2010-01	.2710-01	.9508-03	.7875-03	.1061-02	.6010	6.073	547.2
108	1.0000	.52500	11.000	.2860-01	.2370-01	.3190-01	.1121-02	.9280-03	.1250-02	.7080	7.152	547.6
108	1.0000	.55000	12.000	.3520-01	.2920-01	.3930-01	.1380-02	.1143-02	.1540-02	.8720	8.723	547.5
108	1.0000	.60000	13.000	.2370-01	.1960-01	.2650-01	.9293-03	.7696-03	.1037-02	.5870	5.928	547.9
108	1.0000	.65000	14.000	.3060-01	.2530-01	.3420-01	.1199-02	.9930-03	.1338-02	.7560	7.636	548.7
108	1.0000	.70000	15.000	.1570-01	.1300-01	.1750-01	.6159-03	.5102-03	.6871-03	.3890	3.798	547.0
108	1.0000	.75000	16.000	.7400-02	.6100-02	.8300-02	.2907-03	.2408-03	.3242-03	.1840	1.862	545.7
108	1.0000	.80000	17.000	.2600-02	.2200-02	.2900-02	.1018-03	.8436-04	.1136-03	.6400-01	.6240	545.7
108	2.0000	.28500	18.000	.1640-01	.1360-01	.1830-01	.6426-03	.5320-03	.7132-03	.4050	4.733	549.3
108	2.0000	.33700	19.000	.1630-01	.1350-01	.1820-01	.6392-03	.5293-03	.7132-03	.4030	4.743	548.1
108	2.0000	.35000	20.000	.2990-01	.2470-01	.3330-01	.1170-02	.9684-03	.1306-02	.7370	8.663	549.1
108	2.0000	.42600	21.000	.2290-01	.1890-01	.2550-01	.8965-03	.7422-03	.1000-02	.5650	6.608	548.8
108	2.0000	.47800	22.000	.2870-01	.2370-01	.3200-01	.1124-02	.9303-03	.1254-02	.7080	7.867	548.9

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 194

(RV8002)

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

04-74 (AEDC V418-B8A) B62C12F10M16M127E52VBR19

DATE	07 OCT 75	TRA: E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	M19T0 FT/SEC	M10T0 BTU/ R	M1TAM1 FT/SEC	M10T0 BTU/ R	M1TAM1 FT/SEC	MDOT 3TU/ FT/SEC	DTMDT NEG. R /SEC	TM DEG. R
108	2.0000	5.3000	23.000	3200-01	2650-01	3580-01	1256-02	8118-03	6724-03	1402-02	1040-02	9057-03	7910	8.751	549.1
108	2.0000	5.6700	24.000	2070-01	1720-01	2310-01	8118-03	6724-03	6724-03	9057-03	1040-02	9057-03	5130	5.564	547.3
108	2.1300	6.2000	25.000	1530-01	1260-01	1700-01	5979-03	4963-03	3669-03	3873-03	2735-03	1560	1.674	2.392	544.9
108	2.3000	6.7000	26.000	8900-02	7300-02	9900-02	3473-03	2878-03	2033-03	2735-03	1560	1.674	1.560	1.674	544.5
108	2.0000	7.0500	27.000	6300-02	5200-02	7000-02	1163-03	9639-04	1296-03	9748-04	1296-03	9748-04	7400-01	8.110	543.8
108	2.0000	7.5000	28.000	3000-02	2500-02	3200-02	8742-04	7246-04	2451-04	1900-01	1900-01	1900-01	5500-01	6.120	544.3
108	2.0000	8.0000	29.000	2200-02	1800-02	2500-02	8742-04	7246-04	2451-04	1900-01	1900-01	1900-01	5500-01	6.120	544.3
106	2.0000	8.2400	30.000	8000-03	6000-03	8000-03	2958-04	2451-04	1105-02	1493-02	1493-02	1493-02	8360	8.828	553.3
108	3.0000	20.000	31.000	3410-01	2820-01	3810-01	1336-02	1105-02	1105-02	1493-02	1493-02	1493-02	8360	8.828	553.3
108	3.0000	22.500	32.000	2930-01	2420-01	3270-01	1149-02	9498-03	1283-02	7190	8.015	552.9	552.9	8.015	552.9
108	3.0000	25.000	33.000	2170-01	1800-01	2430-01	8512-03	7043-03	9504-03	5340	5.959	551.3	5340	5.959	551.3
109	3.0000	27.500	34.000	1740-01	1440-01	1940-01	6759-03	5628-03	7589-03	4280	5.110	549.8	4280	5.110	549.8
108	3.0000	30.000	35.000	1470-01	1210-01	1640-01	5748-03	4759-03	6411-03	3620	4.475	548.6	3620	4.475	548.6
106	3.0000	32.500	36.000	2070-01	1710-01	2310-01	8101-03	6706-03	9041-03	5100	5.966	549.2	5100	5.966	549.2
108	3.0000	35.000	37.000	3270-01	2700-01	3640-01	1280-02	1059-02	1428-02	8050	9.239	550.1	8050	9.239	550.1
108	3.0000	37.500	38.000	333-01	2760-01	3720-01	1307-02	1081-02	1459-02	8210	9.598	550.5	8210	9.598	550.5
108	3.0000	40.000	39.000	2150-01	1780-01	2400-01	8414-03	6968-03	9388-03	5310	6.252	547.6	5310	6.252	547.6
108	3.0000	42.500	40.000	3750-01	3100-01	4190-01	1470-02	1216-02	1641-02	9210	10.87	552.5	9210	10.87	552.5
108	3.0000	45.000	41.000	2690-01	2390-01	3220-01	1132-02	9375-03	1263-02	7140	8.143	548.2	7140	8.143	548.2
108	3.0000	47.500	42.000	2650-01	2190-01	2950-01	1037-02	8589-03	1158-02	6540	7.268	548.7	6540	7.268	548.7
103	3.0000	50.000	43.000	2270-01	1880-01	2530-01	8901-03	7373-03	9930-03	5630	6.258	546.9	5630	6.258	546.9
108	3.0000	52.500	44.000	1420-01	1170-01	1580-01	5552-03	4601-03	6182-03	3520	4.123	545.3	3520	4.123	545.3
108	3.0000	55.000	45.000	1160-01	9600-02	1290-01	4548-03	3769-03	5072-03	2880	3.211	544.8	2880	3.211	544.8
108	3.0000	57.500	46.000	7030-02	5800-02	7800-02	2748-03	2279-03	3064-03	1750	1.898	543.7	1750	1.898	543.7
108	3.0000	60.000	47.000	5000-02	4100-02	5500-02	1949-03	1616-03	2173-03	1240	1.316	543.0	1240	1.316	543.0
108	3.0000	62.500	48.000	2500-02	2200-02	2900-02	1023-03	8483-04	1140-03	6500-01	7180	542.8	6500-01	7180	542.8
108	3.0000	65.000	49.000	1700-02	1400-02	1900-02	6517-04	5404-04	7266-04	4100-01	4510	543.0	4100-01	4510	543.0
108	3.0000	67.500	50.000	1900-02	1650-02	2200-02	7635-04	6329-04	8513-04	4800-01	5190	543.9	4800-01	5190	543.9
108	3.0000	70.000	51.000	1500-02	1300-02	1700-02	5976-04	4951-04	6685-04	3800-01	4680	545.2	3800-01	4680	545.2
108	3.0000	72.500	52.000	1400-02	1200-02	1600-02	5657-04	4686-04	6310-04	3600-01	4430	546.8	3600-01	4430	546.8
108	3.0000	75.000	53.000	1500-02	1300-02	1700-02	5835-04	4833-04	6509-04	3700-01	5130	546.7	3700-01	5130	546.7
108	3.0000	77.500	54.000	1700-02	1400-02	1900-02	6526-04	5406-04	7280-04	4100-01	5400	546.0	4100-01	5400	546.0
108	3.0000	80.000	55.000	1700-02	1400-02	1900-02	6522-04	5404-04	7275-04	4100-01	5400	558.5	4100-01	5400	558.5
108	4.0000	20.000	71.000	4190-01	3460-01	4693-01	1642-02	1356-02	1836-02	1019	11.56	554.8	1019	11.56	554.8
108	4.0000	22.500	72.000	2870-01	2370-01	3210-01	1126-02	9307-03	1258-02	7030	8.197	553.6	7030	8.197	553.6
108	4.0000	25.000	73.000	2260-01	1870-01	2520-01	8840-03	7309-03	9874-03	5530	6.451	553.8	5530	6.451	553.8
108	4.0000	27.500	74.000	2600-01	2150-01	2910-01	1020-02	8433-03	1140-02	6380	7.655	551.3	6380	7.655	551.3
108	4.0000	30.000	75.000	3780-01	3130-01	4230-01	1483-02	1226-02	1656-02	9260	12.07	554.5	9260	12.07	554.5
108	4.0000	32.500	76.000	2720-01	2250-01	3040-01	1066-02	8821-03	1191-02	6690	8.733	551.1	6690	8.733	551.1
108	4.0000	35.000	77.000	2430-01	2010-01	2710-01	9516-03	7874-03	1062-02	5980	7.806	550.9	5980	7.806	550.9
108	4.0000	37.500	78.000	2070-01	1720-01	2310-01	8123-03	6724-03	9066-03	5120	6.636	549.3	5120	6.636	549.3
108	4.0000	40.000	80.000	1220-01	1010-01	1360-01	4765-03	3948-03	5316-03	3010	3.945	546.5	3010	3.945	546.5

DATE 07 OCT 75

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 195

04-74 (AEDC V418-B8A) B62C12F10H16H127C52V8R19

(RV8002)

RUN NUMBER	TRA E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TM DEG. R
108	4.0000	.45000	62.000	.8500-02	.7000-02	.9500-02	.3330-03	.2760-03	.3714-03	.2110	2.731	545.4
108	4.0000	.47500	63.000	.6300-02	.5200-02	.7000-02	.2473-03	.2050-03	.2757-03	.1570	1.998	544.3
108	4.0000	.50000	64.000	.5000-02	.4100-02	.5600-02	.1951-03	.1617-03	.2175-03	.1240	1.534	543.7
108	4.0000	.52500	65.000	.4200-02	.3500-02	.4700-02	.1637-03	.1357-03	.1825-03	.1040	1.268	543.3
108	4.0000	.55000	66.000	.3800-02	.3200-02	.4300-02	.1507-03	.1250-03	.1680-03	.9600-01	1.125	542.8
108	4.0000	.60000	67.000	.2300-02	.1900-02	.2500-02	.8817-04	.7313-04	.9828-04	.5600-01	.6320	542.2
108	4.0000	.65000	68.000	.1100-02	.9000-03	.1300-02	.4414-04	.3661-04	.4920-04	.2800-01	.3300	542.1
108	4.0000	.70000	69.000	.8000-03	.6000-03	.9000-03	.3001-04	.2489-04	.3344-04	.1900-01	.2130	541.8
108	4.0000	.75000	70.000	.1400-02	.1100-02	.1500-02	.5342-04	.4430-04	.5955-04	.3400-01	.3790	542.9
108	4.0000	.80000	75.000	.8000-03	.6000-03	.9000-03	.2990-04	.2479-04	.3333-04	.1900-01	.2290	543.5
108	4.0000	.87500	77.000	.1200-02	.1000-02	.1300-02	.4630-04	.3838-04	.5162-04	.2900-01	.3850	544.3
108	4.0000	.90000	78.000	.1200-02	.1000-02	.1300-02	.4687-04	.3885-04	.5227-04	.3000-01	.3850	544.8
108	4.0000	.92500	79.000	.1300-02	.1100-02	.1400-02	.5059-04	.4193-04	.5641-04	.3200-01	.3970	544.8
108	4.0000	.95000	80.000	.9600-02	.7900-02	.1070-01	.3748-03	.3104-03	.4183-03	.2370	2.769	549.8

DATE 07 OCT 75

OH-7N (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 196

OH-7N (AEDC V418-88A) 862C12F1C1816127E52V8R19

(RV8002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	NMO SLUGS /FT2	MU LB-SEC /FT2
58	7.900	19.75	875.1	133.5	-17.2	1.000	97.30	.7000-01	3.115	3861.	.6014-04	.7830-07

RUN NUMBER	RN/L X/D 6 /T	REF BTU/... R FT2SEC	STN NO R= .0175
58	2.966	.4357-01	.2341-01

T DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(10) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTAOT DEG. R /SEC	TH DEG. R
54	1.0000	.27500	1.0000	.1450-01	.1200-01	.1610-01	.6297-03	.5237-03	.7007-03	.4160	4.316	543.8
56	1.0000	.30000	2.0000	.1190-01	.0900-02	.1330-01	.5193-03	.4318-03	.5778-03	.3430	3.643	543.8
58	1.0000	.32500	3.0000	.1027-01	.0500-02	.1130-01	.4427-03	.3682-03	.4925-03	.2930	3.011	543.0
58	1.0000	.35000	4.0000	.1020-01	.0500-02	.1130-01	.4438-03	.3691-03	.4937-03	.2940	3.047	542.8
58	1.0000	.37500	5.0000	.0900-02	.0100-02	.1090-01	.4267-03	.3549-03	.4748-03	.2820	2.968	543.4
58	1.0000	.40000	6.0000	.1200-01	.1000-01	.1330-01	.5219-03	.4341-03	.5807-03	.3450	3.547	543.4
58	1.0000	.42500	7.0000	.1140-01	.0500-02	.1270-01	.4979-03	.4140-03	.5740-03	.3290	3.412	543.9
58	1.0000	.45000	8.0000	.1340-01	.1110-01	.1490-01	.5833-03	.4850-03	.6490-03	.3860	3.941	544.0
58	1.0000	.47500	9.0000	.1950-01	.1620-01	.2170-01	.8488-03	.7055-03	.9448-03	.5500	5.687	545.9
58	1.0000	.50000	10.000	.1780-01	.1480-01	.1980-01	.7750-03	.6443-03	.8625-03	.5120	5.179	545.0
58	1.0000	.52500	11.000	.1780-01	.1480-01	.1980-01	.7750-03	.6443-03	.8625-03	.5130	5.189	545.1
58	1.0000	.55000	12.000	.1830-C	.1520-01	.2040-01	.7989-03	.6842-03	.8890-03	.5280	5.293	544.7
58	1.0000	.60000	13.000	.2200-01	.1820-01	.2440-01	.9568-03	.7951-03	.1065	.6300	3.373	546.5
58	1.0000	.65000	14.000	.2770-01	.2300-01	.3080-01	1205-02	1001-02	.1342	.7930	8.017	547.2
58	1.0000	.70000	15.000	.3240-01	.2690-01	.3610-01	1413-02	1174-02	.1573-02	.9290	9.058	547.6
58	1.0000	.75000	16.000	.5150-01	.4280-01	.5740-01	2246-02	1864-02	.2502-02	1.470	14.84	550.5
58	1.0000	.80000	17.000	.5550-01	.4610-01	.6190-01	2420-02	2007-02	.2698-02	1.573	15.15	555.2
58	1.0000	.85000	18.000	.1370-01	.1140-01	.1520-01	.5951-03	.4949-03	.6671-03	.3940	4.616	543.6
58	2.0000	.33700	19.000	.1150-01	.0800-02	.1310-01	.5138-03	.4273-03	.5716-03	.3400	4.011	543.0
58	2.0000	.39000	20.000	.1360-01	.1130-01	.1510-01	.5926-03	.4929-03	.6393-03	.3920	4.623	543.5
58	2.0000	.42600	21.000	.1890-01	.1570-01	.2110-01	.8252-03	.6859-03	.9183-03	.5440	5.379	545.3
58	2.0000	.47800	22.000	.2170-01	.1810-01	.2420-01	.9463-03	.7870-03	.1054-02	.6240	6.947	545.8

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATIN. DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 197

(RVB002)

OH-74 (AEDC V41B-B8A) 862C12F10H16W127E52V8R19

RUN NUMBER	TRAJ E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(9T0) BTU/ R FT2SEC	H(1T0) BTU/ R FT2SEC	H(12H) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TW DEG. R
58	2.0000	.53200	23.000	.2860-01	.2380-01	.3190-01	.1248-02	.1037-02	.1389-02	.8210	9.129	547.3
58	2.0000	.56700	24.000	.3300-01	.2740-01	.3670-01	.1436-02	.1193-02	.1599-02	.9440	10.23	548.1
58	2.0000	.62000	25.000	.4560-01	.3780-01	.5070-01	.1985-02	.1648-02	.2210-02	1.301	14.10	549.5
58	2.0000	.67000	26.100	.6970-01	.5780-01	.7780-01	.3039-02	.2518-02	.3389-02	1.969	21.25	557.2
58	2.0000	.70500	27.000	.5960-01	.4940-01	.6550-01	.2597-02	.2154-02	.2895-02	1.689	18.07	555.1
58	2.0000	.75000	28.000	.3010-01	.2500-01	.3350-01	.1311-02	.1090-02	.1450-02	.8640	9.467	546.4
58	2.0000	.80000	29.000	.1920-01	.1600-01	.2140-01	.8365-03	.6955-03	.9309-03	.5520	6.088	544.9
58	2.0000	.82400	30.000	.7900-02	.6500-02	.8800-02	.3431-03	.2853-03	.3819-03	.2270	3.153	544.9
58	3.0000	.20000	31.000	.3110-01	.2580-01	.3460-01	.1354-02	.1123-02	.1508-02	.8840	9.334	552.4
58	3.0000	.22500	32.000	.2450-01	.2030-01	.2730-01	.1067-02	.8861-03	.1189-02	.6990	7.803	510.0
58	3.0000	.25000	33.000	.1840-01	.1530-01	.2050-01	.8006-03	.6654-03	.8912-03	.5270	5.897	54.4
58	3.0000	.27500	34.000	.1440-01	.1200-01	.1610-01	.6289-03	.5230-03	.6998-03	.4160	4.979	544.1
58	3.0000	.30000	35.000	.1210-01	.1010-01	.1350-01	.5286-03	.4397-03	.5880-03	.3500	4.335	542.1
58	3.0000	.32500	36.000	.1310-01	.1090-01	.1460-01	.5708-03	.4748-03	.6350-03	.3780	4.435	542.1
58	3.0000	.35000	37.000	.1400-01	.1160-01	.1560-01	.6093-03	.5060-03	.6779-03	.4030	4.683	543.1
58	3.0000	.37500	38.000	.1430-01	.1190-01	.1590-01	.6233-03	.5185-03	.6934-03	.4130	4.912	543.0
58	3.0000	.40000	39.000	.2190-01	.1820-01	.2430-01	.9522-03	.7917-03	.1050-02	.6290	7.406	545.0
58	3.0000	.42500	40.000	.2750-01	.2280-01	.3060-01	.1197-02	.9548-03	.1333-02	.7880	9.328	546.6
58	3.0000	.45000	41.000	.2790-01	.2320-01	.3110-01	.1216-02	.1010-02	.353-02	.8020	3.149	545.8
58	3.0000	.47500	42.000	.2960-01	.2460-01	.3290-01	.1268-02	.1071-02	.1434-02	.8480	9.436	546.7
58	3.0000	.50000	43.000	.3660-01	.3040-01	.4080-01	.1595-02	.1325-02	.1776-02	1.047	11.63	548.8
58	3.0000	.52500	44.000	.4600-01	.3870-01	.5120-01	.2002-02	.1662-02	.2230-02	1.312	15.3	550.0
58	3.0000	.55000	45.000	.6000-01	.4980-01	.6690-01	.2615-02	.2170-02	.2915-02	1.705	18.91	553.1
58	3.0000	.60000	46.000	.7560-01	.6270-01	.8430-01	.3295-02	.2731-02	.3575-02	2.136	23.06	556.9
58	3.0000	.65000	47.000	.3280-01	.2730-01	.3650-01	.1429-02	.1188-02	.1591-02	.9400	9.958	547.3
58	3.0000	.70000	48.000	.1740-01	.1450-01	.1940-01	.7585-03	.6308-03	.8440-03	.5020	5.532	543.9
58	3.0000	.75000	49.000	.1260-01	.1050-01	.1400-01	.5482-03	.4550-03	.6090-03	.3630	3.944	543.3
58	3.0000	.80000	50.000	.1130-01	.9400-02	.1260-01	.4917-03	.4090-03	.5470-03	.3250	3.486	543.3
58	3.0000	.85000	51.000	.1270-01	.1060-01	.1420-01	.5544-03	.4608-03	.6171-03	.3650	4.517	546.1
58	3.0000	.87500	52.000	.3110-01	.2580-01	.3460-01	.1354-02	.124-02	.1508-02	.6850	10.92	551.1
58	3.0000	.90000	53.000	.1600-01	.1330-01	.1790-01	.6984-03	.5799-03	.7778-03	.4580	6.352	549.9
58	3.0000	.92500	54.000	.1420-01	.1180-01	.1580-01	.6194-03	.5144-03	.6898-03	.4060	5.312	549.0
58	3.0000	.95000	55.000	.1530-01	.1270-01	.1700-01	.6848-03	.5523-03	.7402-03	.4370	4.418	547.7
58	4.0000	.20000	71.000	.3850-01	.3190-01	.4300-01	.1678-02	.1390-02	.1872-02	1.084	12.29	559.1
58	4.0000	.22500	72.000	.3000-01	.2490-01	.3340-01	.1306-02	.1083-02	.1456-02	.8510	9.925	553.8
58	4.0000	.25000	73.000	.2140-01	.1790-01	.2390-01	.9339-03	.7754-03	.1040-02	.6110	7.145	550.5
58	4.0000	.27500	74.000	.1790-01	.1490-01	.1990-01	.7806-03	.6484-03	.8692-03	.5130	6.332	548.3
58	4.0000	.30000	56.000	.1330-01	.1110-01	.1480-01	.5799-03	.4820-03	.6475-03	.3820	5.003	546.1
58	4.0000	.32500	57.000	.1640-01	.1360-01	.1830-01	.7149-03	.5943-03	.7956-03	.4720	6.176	545.4
58	4.0000	.35000	58.000	.2710-01	.2250-01	.3020-01	.1181-02	.9808-03	.1315-02	.7760	10.15	547.9
58	4.0000	.37500	59.000	.3810-01	.3170-01	.4250-01	.1661-02	.1379-02	.1850-02	1.088	14.22	549.9
58	4.0000	.40000	60.000	.5200-01	.4310-01	.5790-01	.2266-02	.1880-02	.2525-02	1.478	19.29	552.6
58	4.0000	.42500	61.000	.6890-01	.5710-01	.7680-01	.3000-02	.2487-02	.3346-02	1.945	25.33	556.7

DATE 07 OCT 75

OM-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 198

(RV8002)

OM-74 (AEDC V41B-88A) 862C12F10M16H127E52VBR19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAW BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
58	4.0000	.45000	62.000	.8680-01	.7190-01	.9700-01	.3784-02	.3131-02	.4225-02	2.427	31.13	563.6
58	4.0000	.47500	63.000	.7590-01	.6280-01	.8480-01	.3308-02	.2736-02	.3695-02	2.119	26.69	564.7
58	4.0000	.50000	64.000	.4950-01	.4110-01	.5520-01	.2159-02	.1791-02	.2406-02	1.408	17.35	552.9
58	4.0000	.52500	5.000	.3200-01	.2660-01	.3560-01	.1393-02	.1157-02	.1551-02	.9150	11.29	548.6
58	4.0000	.55000	66.000	.2340-01	.1950-01	.2610-01	.1020-02	.8480-03	.1136-02	.6720	7.871	546.5
58	4.0000	.60000	67.000	.1370-01	.1140-01	.1530-01	.5976-03	.4971-03	.6648-03	.3960	4.454	543.0
58	4.0000	.65000	68.000	.1030-01	.8500-02	.1140-01	.4469-03	.3718-03	.4972-03	.2960	3.474	542.7
58	4.0000	.70000	69.000	.7700-02	.6400-02	.8600-02	.3365-03	.2799-03	.3743-03	.2230	2.486	542.4
58	4.0000	.75000	70.000	.7800-02	.6500-02	.8600-02	.3386-03	.2617-03	.3767-03	.2250	2.503	542.2
58	4.0000	.80000	75.000	.3100-02	.2500-02	.3400-02	.1335-03	.1111-03	.1485-03	.8800-01	1.066	542.4
58	4.0000	.85000	76.000	.3200-02	.2600-02	.3500-02	.1380-03	.1148-03	.1535-03	9100-01	1.085	542.3
58	4.0000	.87500	77.000	.5500-02	.4600-02	.6100-02	.2407-03	.2002-03	.2679-03	.1590	2.085	544.2
58	4.0000	.90000	78.000	.1530-01	.1270-01	.1700-01	.6663-03	.5835-03	.7419-03	.4380	5.657	548.2
58	4.0000	.92500	79.000	.1430-01	.1190-01	.1590-01	.6224-03	.5170-03	.6930-03	.4090	5.049	548.2
58	4.0000	.95000	80.000	.5700-02	.4700-02	.6300-02	.2477-03	.2059-03	.2758-03	.1630	1.910	546.6

0H-7N (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

DATE 07 OCT 75

(RV8002)

0H-7N (AEDC V41B-B8A) B62C12F10H16M127E52VBR19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DFG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
59	7.990	24.86	675.4	1340.	-168.7	1.000	97.30	.7000-01	3.117	3862.	.6012-04	.7836-07

RUN NUMBER	RV/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175 .2342-01
59	2.964	.4359-01	

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT ² SEC	H(1TC) BTU/ R FT ² SEC	H(1TAH) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTADT DEG. R /SEC	TH DEG. R
59	1.0000	.27500	1.0000	.1430-01	.1190-01	.1600-01	.6253-03	.5204-03	.6955-03	.4150	4.310	541.7
59	1.0000	.30000	2.0000	.1270-01	.1060-01	.1420-01	.5556-03	.4624-03	.6180-03	.3690	3.920	541.8
59	1.0000	.32500	3.0000	.1070-01	.8900-02	.1190-01	.4680-03	.3895-03	.5205-03	.3110	3.200	541.0
59	1.0000	.35000	4.0000	.1210-01	.1010-01	.1350-01	.5281-03	.4395-03	.5873-03	.3510	3.644	541.1
59	1.0000	.37500	5.0000	.1130-01	.9400-02	.1260-01	.4939-03	.4110-03	.5494-03	.3280	3.449	542.1
59	1.0000	.40000	6.0000	.1200-01	.1000-01	.1340-01	.5245-03	.4365-03	.5833-03	.3480	3.582	541.6
59	1.0000	.42500	7.0000	.1740-01	.1450-01	.1930-01	.7580-03	.6304-03	.8433-03	.5020	5.203	543.7
59	1.0000	.45000	8.0000	.1940-01	.1610-01	.2160-01	.8446-03	.7025-03	.9396-03	.5500	5.720	543.5
59	1.0000	.47500	9.0000	.1820-01	.1510-01	.2030-01	.7935-03	.6599-03	.8829-03	.5250	5.343	544.1
59	1.0000	.50000	10.000	.1960-01	.1630-01	.2180-01	.8555-03	.7114-03	.9518-03	.5660	5.733	544.1
59	1.0000	.52500	11.000	.2190-01	.1820-01	.2440-01	.9561-03	.7950-03	.1064-02	.6320	6.396	545.1
59	1.0000	.55000	12.000	.2350-01	.1960-01	.2620-01	.1026-02	.8531-03	.1142-02	.6780	6.803	545.0
59	1.0000	.60000	13.000	.3280-01	.2730-01	.3660-01	.1431-02	.1189-02	.1593-02	.9420	9.523	547.7
59	1.0000	.65000	14.000	.6770-01	.5620-01	.7542-01	.2951-02	.2448-02	.3288-02	1.926	19.42	553.2
59	1.0000	.70000	15.000	.5590-01	.4630-01	.6230-01	.2436-02	.2020-02	.2715-02	1.585	15.41	554.8
59	1.0000	.75000	16.000	.2750-01	.2280-01	.3060-01	.1198-02	.9953-03	.1334-02	.7870	7.953	548.9
59	1.0000	.80000	17.000	.1610-01	.1340-01	.1790-01	.7019-03	.5831-03	.7814-03	.4620	4.464	548.0
59	1.0000	.85000	18.000	.1470-01	.1220-01	.1630-01	.6397-03	.5324-03	.71.3-03	.4260	5.000	540.6
59	2.0000	.28500	19.000	.1420-01	.1190-01	.1580-01	.6205-03	.5165-03	.6300-03	.4130	4.877	540.5
59	2.0000	.33700	20.000	.2050-01	.1710-01	.2280-01	.8934-03	.7433-03	.9937-03	.5930	6.995	542.3
59	2.0000	.39000	21.000	.2370-01	.1970-01	.2640-01	.1034-02	.8599-03	.1150-02	.6840	8.025	544.0
59	2.0000	.42600	22.000	.2900-01	.2410-01	.3230-01	.1266-02	.1053-02	.1409-02	.8370	9.321	544.7

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 200

(RV8002)

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-B8A) 862C12F10M16M127E52V8R19

RUN NUMBER	TRAJE	X/L	T, NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1AM) BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TH DEG. R
59	2.0000	.53000	23.000	.4960-01	.4120-01	.5530-01	.2182-02	.1795-02	.2408-02	1.416	15.72	550.8
59	2.0000	.56700	24.000	.8410-01	.6970-01	.9780-01	.3667-02	.3038-02	.4091-02	2.372	25.58	559.2
59	2.0000	.62000	25.000	.5060-01	.4200-01	.5640-01	.2207-02	.1832-02	.2458-02	1.447	15.68	550.3
59	2.0000	.67000	26.000	.2050-01	.1700-01	.2280-01	.8929-03	.7424-03	.9935-03	.5900	6.414	544.7
59	2.0000	.70500	27.000	.1450-01	.1200-01	.1610-01	.6312-03	.5251-03	.7022-03	.4180	4.504	543.3
59	2.0000	.75000	28.000	.1080-01	.9000-02	.1210-01	.4729-03	.3934-03	.5260-03	.3140	3.445	542.7
59	2.0000	.80000	29.000	.9500-02	.7900-02	.1060-01	.4159-03	.3459-03	.4627-03	.2750	3.037	543.9
59	2.0000	.82400	30.000	.3600-02	.3000-02	.4000-02	.1580-03	.1314-03	.1759-03	.1040	1.452	545.6
59	3.0000	.20000	31.000	.3250-01	.2700-01	.3620-01	.1191-02	.9893-03	.1325-02	.7840	8.765	547.3
59	3.0000	.22500	32.000	.2730-01	.2270-01	.3290-01	.8967-03	.7459-03	.9976-03	.5940	6.653	543.5
59	3.0000	.25000	33.000	.2060-01	.1710-01	.2290-01	.6920-03	.5759-03	.7695-03	.4600	5.522	540.8
59	3.0000	.27500	34.000	.1590-01	.1320-01	.1770-01	.6224-03	.5182-03	.6920-03	.4150	5.146	539.5
59	3.0000	.30000	35.000	.1430-01	.1190-01	.1590-01	.6560-03	.5462-03	.7294-03	.4370	5.135	539.8
59	3.0000	.32500	36.000	.1510-01	.1250-01	.1670-01	.7015-03	.5840-03	.7800-03	.4670	5.432	540.0
59	3.0000	.35000	37.000	.1610-01	.1340-01	.1790-01	.1136-02	.9452-03	.1263-02	.7540	8.851	542.1
59	3.0000	.37500	38.000	.2610-01	.2170-01	.2900-01	.1388-02	.1154-02	.1544-02	.9190	10.84	543.8
59	3.0000	.40000	39.000	.3180-01	.2650-01	.3540-01	.1609-02	.1337-02	.1791-02	1.061	12.56	546.4
59	3.0000	.42500	40.000	.3690-01	.3070-01	.4110-01	.2063-02	.1714-02	.2255-02	1.358	15.49	547.6
59	3.0000	.45000	41.000	.4730-01	.3930-01	.5270-01	.2785-02	.2311-02	.3104-02	1.819	20.17	552.9
59	3.0000	.47500	42.000	.6390-01	.5300-01	.7120-01	.3397-02	.2789-02	.3789-02	2.200	24.33	558.3
59	3.0000	.50000	43.000	.7790-01	.6460-01	.8690-01	.2504-02	.2079-02	.2789-02	1.640	19.16	551.1
59	3.0000	.52500	44.000	.5740-01	.4770-01	.6400-01	.1699-02	.1411-02	.1891-02	1.118	12.43	547.8
59	3.0000	.55000	45.000	.3900-01	.3240-01	.4340-01	.7524-03	.6259-03	.8370-03	.4990	5.421	543.3
59	3.0000	.60000	46.000	.1730-01	.1440-01	.1920-01	.4979-03	.4143-03	.5538-03	.3310	3.510	542.2
59	3.0000	.65000	47.000	.1140-01	.9500-02	.1270-01	.3248-03	.2703-03	.3612-03	.2160	2.386	541.1
59	3.0000	.70000	48.000	.7500-02	.6200-02	.8300-02	.2809-03	.2337-03	.3122-03	.1870	2.033	540.9
59	3.0000	.75000	49.000	.6400-02	.5400-02	.7200-02	.1932-03	.1608-03	.2148-03	.1280	1.376	541.7
59	3.0000	.80000	50.000	.4400-02	.3700-02	.4900-02	.1913-03	.1590-03	.2129-03	.1260	1.561	546.2
59	3.0000	.85000	51.000	.9300-02	.8200-02	.1100-01	.4301-03	.3574-03	.4789-03	.2930	3.496	548.0
59	3.0000	.90000	52.000	.1820-01	.1510-01	.2030-01	.7954-03	.6603-03	.8861-03	.5210	7.227	551.1
59	3.0000	.95000	53.000	.2370-01	.1970-01	.2640-01	.1033-02	.8577-03	.1151-02	.6770	8.834	551.2
59	3.0000	.95000	54.000	.2310-01	.1920-01	.2570-01	.1005-02	.8348-03	.1120-02	.6590	6.654	550.3
59	4.0000	.20000	55.000	.3960-01	.3290-01	.4420-01	.1728-02	.1432-02	.1926-02	1.121	12.72	557.1
59	4.0000	.22500	56.000	.3020-01	.2510-01	.3370-01	.1317-02	.1094-02	.1468-02	.8630	10.08	551.1
59	4.0000	.25000	57.000	.2360-01	.1960-01	.2630-01	.1031-02	.8564-03	.1148-02	.6780	7.938	547.9
59	4.0000	.27500	58.000	.1990-01	.1660-01	.2220-01	.8693-03	.7217-03	.9665-03	.5730	7.082	546.3
59	4.0000	.30000	59.000	.1710-01	.1420-01	.1900-01	.7432-03	.6182-03	.8258-03	.4930	6.457	543.3
59	4.0000	.32500	60.000	.2810-01	.2330-01	.3120-01	.1223-02	.1017-02	.1361-02	.8080	10.58	545.5
59	4.0000	.35000	61.000	.4640-01	.3850-01	.5160-01	.2021-02	.1678-02	.2251-02	1.326	17.32	550.0
59	4.0000	.37500	62.000	.7010-01	.5810-01	.7820-01	.3057-02	.2534-02	.3408-02	1.986	25.87	556.3
59	4.0000	.40000	63.000	.6180-01	.5120-01	.6890-01	.2693-02	.2233-02	.3002-02	1.752	22.83	555.3
59	4.0000	.42500	64.000	.3920-01	.3260-01	.4370-01	.1709-02	.1420-02	.1504-02	1.123	14.68	549.1

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 201

OH-74 (AEDC V41B-88A) B62C12F10H16H127252V8R19

(RV8002)

RUN NUMBER	TRA:E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R F12SEC	H1T0 BTU/ R F12SEC	H1TAN BTU/ R F12SEC	QDOT BTU/ F12SEC	DTHOT DEG. R /SEC	TH DEG. R
59	4.0000	.45000	62.000	.2250-01	.1870-01	.2510-01	.9828-03	.8171-03	.1094-02	.6500	8.410	543.0
59	4.0000	.47500	63.000	.1600-01	.1330-01	.1780-01	.6982-03	.5806-03	.7769-03	.4620	5.676	544.7
59	4.0000	.50000	64.000	.1120-01	.9300-02	.1250-01	.4897-03	.4074-03	.5448-03	.3250	4.021	543.0
59	4.0000	.52500	65.000	.8900-02	.7400-02	.9900-02	.3880-03	.3211-03	.4294-03	.2560	3.169	543.0
59	4.0000	.55000	66.000	.8100-02	.6700-02	.9000-02	.3519-03	.2828-03	.3914-03	.2340	2.742	542.1
59	4.0000	.60000	67.000	.5900-02	.4900-02	.6500-02	.2550-03	.2122-03	.2836-03	.1690	1.910	541.4
59	4.0000	.65000	68.000	.4700-02	.3900-02	.5200-02	.2045-03	.1702-03	.2274-03	.1260	1.595	541.2
59	4.0000	.70000	69.000	.3300-02	.2800-02	.3700-02	.1456-03	.1212-03	.1619-03	.9700-01	1.078	541.9
59	4.0000	.75000	70.000	.2100-02	.1800-02	.2400-02	.9323-04	.7760-04	.1037-03	.6200-01	.6920	540.7
59	4.0000	.80000	75.000	.1700-02	.1400-02	.1900-02	.7273-04	.6050-04	.8091-04	.4800-01	.5810	543.0
59	4.0000	.85000	76.000	.3300-02	.2700-02	.3700-02	.1438-03	.1196-03	.1599-03	.9500-01	1.130	543.0
59	4.0000	.87500	77.000	.3100-02	.2600-02	.3400-02	.1337-03	.1112-03	.1488-03	.8800-01	1.159	544.6
59	4.0000	.90000	78.000	.6700-02	.5600-02	.7500-02	.2923-03	.2429-03	.3253-03	.1930	2.494	546.3
59	4.0000	.92500	79.000	.1100-01	.9100-02	.1220-01	.4777-03	.3969-03	.5318-03	.3150	3.886	547.6
59	4.0000	.95000	80.000	.9900-02	.8200-02	.1100-01	.4322-03	.3591-03	.4812-03	.2840	3.326	548.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 202

C 74 (AEDC V41B-B8A) B62C12F10M16W127E52VBR19

(RV8002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MJ LB-SEC /FT ²
60	7.990	29.83	673.6	134.1	-90.02	1.000	97.40	.7000-01	3.109	3864.	.5992-04	.7842-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175 .2346-01
60	2.952	.4353-01	

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1GTO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
60	1.0000	.27500	1.0000	.1550-01	.1290-01	.1720-01	.6740-03	.5604-03	.7500-03	.4460	4.615	545.5
60	1.0000	.30000	2.0000	.1300-01	.1080-01	.1450-01	.5661-03	.4706-03	.6299-03	.3740	3.969	545.5
60	1.0000	.32500	3.0000	.1260-01	.1050-01	.1400-01	.5479-03	.4556-03	.6096-03	.3630	3.722	544.9
60	1.0000	.35000	4.0000	.1250-01	.1040-01	.1390-01	.5438-03	.4522-03	.6051-03	.3600	3.728	545.0
60	1.0000	.37500	5.0000	.1190-01	.9900-02	.1320-01	.5170-03	.4298-03	.5754-03	.3420	3.589	545.8
60	1.0000	.40000	6.0000	.1194-01	.1610-01	.2160-01	.8444-03	.7018-03	.9400-03	.5570	5.709	547.3
60	1.0000	.42500	7.0000	.1820-01	.1520-01	.2030-01	.7944-03	.6601-03	.8844-03	.5230	5.413	548.0
60	1.0000	.45000	8.0000	.2200-01	.1830-01	.2450-01	.9567-03	.7947-03	.1055-02	.6300	5.419	548.8
60	1.0000	.47500	9.0000	.1690-01	.1410-01	.1880-01	.7370-03	.6123-03	.8206-03	.4850	4.926	548.4
60	1.0000	.50000	10.0000	.2210-01	.1840-01	.2460-01	.9634-03	.8002-03	.1073-02	.6330	6.395	549.6
60	1.0000	.52500	11.0000	.2870-01	.2360-01	.3190-01	.1248-02	.1036-02	.1390-02	.8190	8.261	550.9
60	1.0000	.55000	12.0000	.3110-01	.2580-01	.3460-01	.1353-02	.1123-02	.1507-02	.8870	8.873	551.0
60	1.0000	.60000	13.0000	.4490-01	.3720-01	.5000-01	.1953-02	.1619-02	.2178-02	1.268	12.76	557.5
60	1.0000	.65000	14.0000	.3230-01	.2680-01	.3600-01	.1408-02	.1169-02	.1569-02	.9210	9.289	552.7
60	1.0000	.70000	15.0000	.2970-01	.2460-01	.3310-01	.1292-02	.1072-02	.1440-02	.8450	8.214	553.3
60	1.0000	.75000	16.0000	.1730-01	.1430-01	.1920-01	.7518-03	.6243-03	.8374-03	.4930	4.981	550.6
60	1.0000	.80000	17.0000	.1130-01	.9400-02	.1260-01	.4917-03	.4083-03	.5475-03	.3230	3.122	549.6
60	1.0000	.85000	18.0000	.1550-01	.1290-01	.1730-01	.6761-03	.5619-03	.7573-03	.4470	5.231	546.2
60	2.0000	.28500	19.0000	.1400-01	.1160-01	.1550-01	.6080-03	.5055-03	.6767-03	.4020	4.733	545.9
60	2.0000	.33700	20.0000	.2630-01	.2190-01	.2930-01	.1145-02	.9514-03	.1275-02	.7530	8.857	549.2
60	2.0000	.39000	21.0000	.3110-01	.2580-01	.3470-01	.1355-02	.1125-02	.1510-02	.8870	10.36	552.1
60	2.0000	.42600	22.0000	.4330-01	.3590-01	.4820-01	.1883-02	.1562-02	.2099-02	1.229	13.61	554.5

(RV8002)

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-BBA) B62C12F10H16H12E52V8R19

RUN NUMBER	TIME	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H(90) BTU/ R FT2SEC	H(TO) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TM DEG. R
60	2.0000	.53000	23.000	.4630-01	.3840-01	.5170-01	.2017-02	.1672-02	.2249-02	1.311	14.50	557.1
60	2.0000	.56700	24.000	.3210-01	.2660-01	.3580-01	.1398-02	.1160-02	.1557-02	9.140	9.891	552.8
60	2.0000	.62000	25.000	.1880-01	.1560-01	.2090-01	.8177-03	.6791-03	.9107-03	.5370	5.818	550.2
60	2.0000	.67000	26.000	.1440-01	.1190-01	.1600-01	.6257-03	.5198-03	.6966-03	.4120	4.465	548.7
60	2.0000	.70500	27.000	.1110-01	.9200-02	.1240-01	.4844-03	.4024-03	.5392-03	.3190	3.427	548.1
60	2.0000	.75000	28.000	.8000-02	.6600-02	.8900-02	.3466-03	.2681-03	.3857-03	.2290	2.509	546.4
60	2.0000	.80000	29.000	.5400-02	.4500-02	.6000-02	.2364-03	.1965-03	.2631-03	.1560	1.719	546.7
60	2.0000	.82400	30.000	.9000-03	.7000-03	.1000-02	.3755-04	.3120-04	.4180-04	.2500-01	.3440	547.4
60	3.0000	.20000	31.000	.3320-01	.2750-01	.3700-01	.1444-02	.1197-02	.1610-02	.9390	9.899	556.6
60	3.0000	.22500	32.000	.2870-01	.2380-01	.3200-01	.1249-02	.1037-02	.1392-02	.8170	9.101	553.2
60	3.0000	.25000	33.000	.2210-01	.1840-01	.2460-01	.9632-03	.8000-03	.1073-02	.6330	7.071	549.4
60	3.0000	.27500	34.000	.1700-01	.1420-01	.1900-01	.7412-03	.6161-03	.8250-03	.4890	5.854	546.7
60	3.0000	.30000	35.000	.1560-01	.1290-01	.1730-01	.6775-03	.5632-03	.7540-03	.4480	5.539	545.8
60	3.0000	.32500	36.000	.1570-01	.1300-01	.1750-01	.6831-03	.5679-03	.7602-03	.4520	5.291	545.8
60	3.0000	.35000	37.000	.2550-01	.2120-01	.2840-01	.1111-02	.9231-03	.1237-02	.7320	8.475	548.1
60	3.0000	.37500	38.000	.3320-01	.2760-01	.3700-01	.1447-02	.1201-02	.1611-02	.9490	11.10	550.6
60	3.0000	.40000	39.000	.3680-01	.3060-01	.4100-01	.1602-02	.1330-02	.1785-02	1.049	12.32	552.2
60	3.0000	.42500	40.000	.3240-01	.2690-01	.3610-01	.1409-02	.1169-02	.1570-02	.9220	10.87	552.8
60	3.0000	.45000	41.000	.4990-01	.4140-01	.5560-01	.2172-02	.1801-02	.2422-02	1.413	16.04	556.5
60	3.0000	.47500	42.000	.3640-01	.3020-01	.4050-01	.1583-02	.1314-02	.1764-02	1.034	11.47	553.6
60	3.0000	.50000	43.000	.2710-01	.2250-01	.3020-01	.1180-02	.9799-03	.1315-02	.7740	8.590	551.2
60	3.0000	.52500	44.000	.1890-01	.1570-01	.2110-01	.8234-03	.6839-03	.9170-03	.5410	6.328	549.6
60	3.0000	.55000	45.000	.1520-01	.1260-01	.1690-01	.6597-03	.5481-03	.7346-03	.4340	4.825	548.8
60	3.0000	.60000	46.000	.8800-02	.7400-02	.9800-02	.3851-03	.3201-03	.4287-03	.2540	2.757	547.0
60	3.0000	.65000	47.000	.6300-02	.5200-02	.7000-02	.2746-03	.2282-03	.3056-03	.1810	1.921	546.5
60	3.0000	.70000	48.000	.4700-02	.3900-02	.5300-02	.2058-03	.1711-03	.2290-03	.1360	1.500	545.5
60	3.0000	.75000	49.000	.3300-02	.2700-02	.3600-02	.1426-03	.1186-03	.1587-03	.9400-01	1.026	544.7
60	3.0000	.80000	50.000	.1900-02	.1600-02	.2100-02	.8314-04	.6913-04	.9251-04	.5500-01	.5890	545.1
60	3.0000	.85000	51.000	.3400-02	.2800-02	.3800-02	.1478-03	.1227-03	.1645-03	.9700-01	1.200	548.9
60	3.0000	.87500	52.000	.2800-02	.2400-02	.3200-02	.1233-03	.1024-03	.1373-03	.8100-01	1.000	549.7
60	3.0000	.90000	53.000	.2000-02	.1600-02	.2200-02	.8991-04	.7134-04	.9569-04	.5600-01	.7830	550.5
60	3.0000	.92500	54.000	.3400-02	.2800-02	.3800-02	.1482-03	.1230-03	.1650-03	.9100-01	1.272	549.9
60	3.0000	.95000	55.000	.4900-02	.4000-02	.5400-02	.2112-03	.1754-03	.2351-03	.1390	1.405	548.5
60	4.0000	.20000	71.000	.3840-01	.3180-01	.4280-01	.1670-02	.1382-02	.1865-02	1.075	12.17	563.0
60	4.0000	.22500	72.000	.3000-01	.2490-01	.3340-01	.1306-02	.1083-02	.1456-02	.8500	9.902	556.3
60	4.0000	.25000	73.000	.330-01	.1930-01	.2590-01	.1014-02	.8413-03	.1130-02	.6630	7.740	552.9
60	4.0000	.27500	74.000	.270-01	.1840-01	.2470-01	.9647-03	.8008-03	.1075-02	.6320	7.797	551.4
60	4.0000	.30000	75.000	.2010-01	.1670-01	.2230-01	.1698-02	.1408-02	.1893-02	.5740	7.502	549.4
60	4.0000	.32500	57.000	.3900-01	.3230-01	.4350-01	.1698-02	.1408-02	.1893-02	1.107	14.42	555.2
60	4.0000	.35000	58.000	.4810-01	.3990-01	.5370-01	.2096-02	.1736-02	.2338-02	1.358	17.66	559.2
60	4.0000	.37500	59.000	.3180-01	.2640-01	.3540-01	.1384-02	.1149-02	.1542-02	.9060	11.82	552.6
60	4.0000	.40000	60.000	.2300-01	.1910-01	.2560-01	.9995-03	.8299-03	.1113-02	.6560	8.563	550.9
60	4.0000	.42500	61.000	.1680-01	.1400-01	.1870-01	.7319-03	.6079-03	.8151-03	.4810	6.286	549.7

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 204

04-74 (AEDC V41B-B8A) 862C12F10H164127E52V8R19

(RV8002)

RUN NUMBER	TRA:E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(9T) BTU/ R	H(10) BTU/ R	H(14M) BTU/ R	QOOT BTU/	DTMDT DEG. R	TM DEG. R
60	4.0000	.45000	62.000	.1100-01	.9200-02	.1230-01	.4800-03	.3995-03	.5352-03	.3170	4.095	548.0
60	4.0000	.47500	63.000	.7900-02	.6500-02	.8800-02	.3430-03	.2850-03	.3818-03	.2260	2.874	547.5
60	4.0000	.50000	64.000	.5200-02	.4300-02	.5800-02	.2255-03	.1874-03	.2509-03	.1490	1.839	546.8
60	4.0000	.52500	65.000	.4600-02	.3800-02	.5200-02	.2015-03	.1675-03	.2243-03	.1330	1.645	546.5
60	4.0000	.55000	66.000	.4100-02	.3400-02	.4600-02	.1785-03	.1484-03	.1986-03	.1180	1.383	545.6
60	4.0000	.60000	67.000	.2800-02	.2400-02	.3100-02	.1232-03	.1024-03	.1370-03	.8200-01	.9180	544.4
60	4.0000	.65000	68.000	.2000-02	.1700-02	.2200-02	.8707-04	.7243-04	.9687-04	.5800-01	.6770	543.8
60	4.0000	.70000	69.000	.1000-02	.9000-03	.1100-02	.4484-04	.3730-04	.4988-04	.3000-01	.3310	543.9
60	4.0000	.75000	70.000	.1100-02	.9000-03	.1300-02	.4923-04	.4095-04	.5476-04	.3300-01	.3640	543.4
60	4.0000	.80000	75.000	.1000-02	.9000-03	.1100-02	.4463-04	.3712-04	.4966-04	.3000-01	.3560	544.5
60	4.0000	.85000	76.000	.1300-02	.1100-02	.1400-02	.5615-04	.4668-04	.6249-04	.3700-01	.4390	546.0
60	4.0000	.87500	77.000	.2000-02	.1700-02	.2300-02	.8924-04	.7417-04	.9932-04	.5900-01	.7710	546.7
60	4.0000	.90000	78.000	.2400-02	.2000-02	.2700-02	.1044-03	.8675-04	.1162-03	.6900-01	.8900	547.3
60	4.0000	.92500	79.000	.2600-02	.2200-02	.2900-02	.1130-03	.9389-04	.1258-03	.7400-01	.9200	547.9
60	4.0000	.95000	80.000	.2200-02	.1800-02	.2400-02	.9527-04	.7917-04	.1060-03	.6300-01	.7360	547.2

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 205

OH-74 (AEDC V41B-88A) 862C12F10M16W127E52V8R19

(RV8002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
61	7.990	34.85	673.2	1342.	168.8	1.000	97.50	.7000-01	3.107	3865.	.5984-04	.7847-07

RUN NUMBER	RM/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175 .2348-01
61	2.947	.4353-01	

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19TO BTU/ R FT ² SEC	H1TO BTU/ R FT ² SEC	H1TAH BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTAOT DEG. R /SEC	T4 DEG. R
61	1.0000	.27500	1.0000	.1650-01	.1370-01	.1840-01	.7194-03	.5985-03	.8003-03	.4780	4.950	543.9
61	1.0000	.30000	2.0000	.1430-01	.1190-01	.1600-01	.6245-03	.5195-03	.6947-03	.4150	4.399	543.8
61	1.0000	.32500	3.0000	.1120-01	.0930-02	.1250-01	.4892-03	.4070-03	.5441-03	.3250	3.337	543.4
61	1.0000	.35000	4.0000	.1300-01	.1080-01	.1440-01	.5842-03	.4693-03	.6276-03	.3750	3.883	543.7
61	1.0000	.37500	5.0000	.1820-01	.1520-01	.2030-01	.7936-03	.6599-03	.8831-03	.5260	5.518	545.6
61	1.0000	.40000	6.0000	.2160-01	.1800-01	.2400-01	.9398-03	.7814-03	.1046-02	.6220	6.382	545.7
61	1.0000	.42500	7.0000	.1650-01	.1380-01	.1850-01	.7242-03	.6021-03	.8059-03	.4790	4.960	546.2
61	1.0000	.45000	8.0000	.1640-01	.1530-01	.2050-01	.8002-03	.6653-03	.8905-03	.5300	5.408	545.9
61	1.0000	.47500	9.0000	.2490-01	.2070-01	.2780-01	.1085-02	.9020-03	.1208-02	.7160	7.268	548.2
61	1.0000	.50000	10.0000	.2240-01	.1860-01	.2490-01	.9743-03	.8097-03	.1085-02	.6430	6.501	547.7
61	1.0000	.52500	11.0000	.2820-01	.2340-01	.3130-01	.1225-02	.1018-02	.1364-02	.8090	8.173	547.9
61	1.0000	.55000	12.0000	.3480-01	.2890-01	.3870-01	.1514-02	.1258-02	.1685-02	.9970	9.979	547.2
61	1.0000	.60000	13.0000	.2400-01	.1990-01	.2670-01	.1043-02	.8659-03	.1161-02	.6860	6.924	553.0
61	1.0000	.65000	14.0000	.3340-01	.2780-01	.3720-01	.1455-02	.1208-02	.1620-02	.9560	9.648	550.7
61	1.0000	.70000	15.0000	.1770-01	.1470-01	.1970-01	.7697-03	.6396-03	.8568-03	.5080	4.953	548.0
61	1.0000	.75000	16.0000	.8000-02	.6700-02	.8900-02	.3498-03	.2908-03	.3892-03	.2320	2.344	545.5
61	1.0000	.80000	17.0000	.2300-02	.1900-02	.2600-02	.1007-03	.8376-04	.1121-03	.6700-01	.6450	546.1
61	1.0000	.85000	18.0000	.1700-01	.1110-01	.1850-01	.7396-03	.6152-03	.8278-03	.4910	5.758	543.9
61	2.0000	.28500	19.0000	.1520-01	.1260-01	.1690-01	.6612-03	.5499-03	.7356-03	.4390	5.170	544.3
61	2.0000	.33700	20.0000	.2800-01	.2330-01	.3120-01	.1220-02	.1014-02	.1358-02	.8060	9.492	547.0
61	2.0000	.39000	21.0000	.2250-01	.1870-01	.2510-01	.9807-03	.8150-03	.1092-02	.6470	7.575	547.8
61	2.0000	.42600	22.0000	.2960-01	.2460-01	.3300-01	.1290-02	.1072-02	.1436-02	.8500	9.452	548.5

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 205

(RVB002)

OH-74 (AEDC V41B-B8A) B62C12F10H16H127E32V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1STO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
61	2.0000	.53000	23.000	.3260-01	.2710-01	.3940-01	.1421-02	.1180-02	.1583-02	.9340	10.37	950.6
61	2.0000	.56700	24.000	.2280-01	.1690-01	.2540-01	.9924-03	.8244-03	.1105-02	.6540	7.087	549.0
61	2.0000	.62000	25.000	.1740-01	.1440-01	.1930-01	.7566-03	.6269-03	.8421-03	.5000	5.425	547.0
61	2.0000	.67000	26.000	.8100-02	.6700-02	.9000-02	.3522-03	.2929-03	.3919-03	.2330	2.536	544.9
61	2.0000	.70500	27.000	.6000-02	.5000-02	.6700-02	.2184-03	.2920-03	.2920-03	.1740	1.875	544.0
61	2.0000	.75000	28.000	.3800-02	.3100-02	.4200-02	.1633-03	.1359-03	.1817-03	.1090	1.193	542.8
61	2.0000	.80000	29.000	.2600-02	.2200-02	.2900-02	.1148-03	.9548-04	.1277-03	.7600-01	.8400	543.9
61	2.0000	.82400	30.000	.1000-02	.8000-03	.1100-02	.4236-04	.3523-04	.4714-04	.2800-01	.3910	545.3
61	3.0000	.20000	31.000	.3400-01	.2820-01	.3790-01	.1481-02	.1229-02	.1650-02	.9700	10.24	553.1
61	3.0000	.22500	32.000	.2940-01	.2440-01	.3270-01	.1062-02	.1062-02	.1424-02	.8410	9.392	549.8
61	3.0000	.25000	33.000	.2270-01	.1880-01	.2520-01	.9862-03	.8198-03	.1098-02	.6520	7.290	546.6
61	3.0000	.27500	34.000	.1740-01	.1450-01	.1940-01	.7573-03	.6298-03	.8425-03	.5020	6.016	544.4
61	3.0000	.30000	35.000	.1440-01	.1200-01	.1600-01	.6257-02	.5276-03	.6360-03	.4160	5.149	543.2
61	3.0000	.32500	36.000	.2090-01	.1740-01	.2320-01	.9088-03	.7558-03	.1011-02	.6030	7.063	544.7
61	3.0000	.35000	37.000	.3120-01	.2590-01	.3470-01	.1129-02	.1129-02	.1512-02	.8980	10.41	546.5
61	3.0000	.37500	38.000	.3220-01	.2670-01	.3580-01	.1400-02	.1164-02	.1559-02	.9240	10.82	547.7
61	3.0000	.40000	39.000	.2140-01	.1780-01	.2380-01	.9305-03	.7737-03	.1036-02	.6160	7.252	546.0
61	3.0000	.42500	40.000	.4080-01	.3380-01	.4540-01	.1774-02	.1473-02	.1976-02	.1164	13.74	551.7
61	3.0000	.45000	41.000	.3090-01	.2560-01	.3430-01	.1340-02	.1113-02	.1491-02	.8840	10.08	548.1
61	3.0000	.47500	42.000	.2900-01	.2410-01	.3230-01	.1262-02	.1049-02	.1405-02	.8320	9.245	548.8
61	3.0000	.50000	43.000	.2530-01	.2100-01	.2820-01	.1101-02	.9145-03	.1226-02	.7250	8.059	548.9
61	3.0000	.52500	44.000	.1530-01	.1270-01	.1700-01	.6646-03	.5526-03	.7396-03	.4400	5.154	545.8
61	3.0000	.55000	45.000	.1200-01	.1000-01	.1340-01	.5233-03	.4351-03	.5822-03	.3470	3.859	545.3
61	3.0000	.60000	46.000	.7000-02	.5800-02	.7800-02	.3036-03	.2626-03	.3377-03	.2020	2.193	543.4
61	3.0000	.65000	47.000	.5300-02	.4400-02	.5900-02	.2328-03	.1937-03	.2589-03	.1550	1.643	542.7
61	3.0000	.70000	48.000	.3200-02	.2600-02	.3500-02	.1393-03	.1151-03	.1538-03	.9200-01	1.016	542.3
61	3.0000	.75000	49.000	.8200-02	.1800-02	.2400-02	.9456-04	.7870-04	.1052-03	.5300-01	.6850	541.8
61	3.0000	.80000	50.000	.1900-02	.1600-02	.2100-02	.8277-04	.6886-04	.9206-04	.9500-01	.5900	543.1
61	3.0000	.85000	51.000	.1400-02	.1200-02	.1600-02	.6233-04	.5182-04	.6336-04	.4100-01	.5100	546.1
61	3.0000	.87500	52.000	.1500-02	.1200-02	.1600-02	.6439-04	.5353-04	.7166-04	.4300-01	.5260	546.5
61	3.0000	.90000	53.000	.1400-02	.1200-02	.1600-02	.6153-04	.5115-04	.6848-04	.4100-01	.5660	546.7
61	3.0000	.92500	54.000	.1700-02	.1400-02	.1900-02	.7341-04	.6103-04	.8170-04	.4900-01	.6350	546.5
61	3.0000	.95000	55.000	.1900-02	.1500-02	.2100-02	.8065-04	.6706-04	.8975-04	.5300-01	.5400	545.8
61	4.0000	.20000	71.000	.3620-01	.3000-01	.4040-01	.1578-02	.1307-02	.1759-02	.1025	11.62	558.3
61	4.0000	.22500	72.000	.2650-01	.2360-01	.3170-01	.1240-02	.1029-02	.1381-02	.8120	9.474	553.1
61	4.0000	.25000	73.000	.2310-01	.1920-01	.2570-01	.1006-02	.8356-03	.1120-02	.5620	7.733	550.2
61	4.0000	.27500	74.000	.2610-01	.2170-01	.2910-01	.1136-02	.9432-03	.1255-02	.7470	9.215	550.2
61	4.0000	.30000	75.000	.2530-01	.2190-01	.2810-01	.1100-02	.9137-03	.1274-02	.7250	9.484	548.2
61	4.0000	.32500	76.000	.3750-01	.3120-01	.4190-01	.1637-02	.1359-02	.1824-02	1.073	14.00	552.2
61	4.0000	.35000	77.000	.2770-01	.2300-01	.3080-01	.1205-02	.1001-02	.1342-02	.7930	10.37	549.5
61	4.0000	.37500	78.000	.2610-01	.2170-01	.2910-01	.1137-02	.9447-03	.1266-02	.7500	9.802	548.6
61	4.0000	.40000	79.000	.2310-01	.1920-01	.2570-01	.1004-02	.8345-03	.1118-02	.6630	8.669	547.8
61	4.0000	.42500	81.000	.1282-01	.1070-01	.1430-01	.5581-03	.4641-03	.6211-03	.3700	4.840	545.5

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

Q44-74 (AEOC V418-B8A) B62C12F10M16W127E52V8R19

RUN NUMBER	TRA.E	X/L	T/C NO	H/HREF R=0.3	H/HREF R=1.0	H/HREF R=TAH	H(9T0) BTU/ R FT ² SEC	H(10T0) BTU/ R FT ² SEC	H(11AH) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTWDT DEG. R /SEC	TM DEG. R
61	4.0000	.45000	62.000	.8700-02	.7200-02	.9600-02	.3770-03	.3136-03	.4194-03	.2500	3.238	544.5
61	4.0000	.47500	63.000	.6600-02	.5500-02	.7300-02	.2870-03	.2388-03	.3193-03	.1910	2.427	543.8
61	4.0000	.50000	64.000	.5300-02	.4400-02	.5900-02	.2299-03	.1912-03	.2557-03	.1530	1.891	543.4
61	4.0000	.52500	65.000	.4400-02	.3600-02	.4900-02	.1903-03	.1524-03	.2117-03	.1270	1.566	543.1
61	4.0000	.55000	66.000	.3300-02	.2800-02	.3700-02	.1455-03	.1210-03	.1618-03	.9700-01	1.135	542.7
61	4.0000	.60000	67.000	.1200-02	.1700-02	.2300-02	.8904-04	.7411-04	.9902-04	.5900-01	.6680	541.8
61	4.0000	.65000	68.000	.9000-03	.8000-03	.1000-02	.3978-04	.3311-04	.5424-04	.2700-01	.3110	541.4
61	4.0000	.70000	69.000	.1100-02	.9000-03	.1200-02	.4655-04	.3874-04	.5177-04	.3100-01	.3460	542.1
61	4.0000	.75000	70.000	.1600-02	.1400-02	.1800-02	.7071-04	.5884-04	.7863-04	.4700-01	.5250	542.1
61	4.0000	.80000	75.000	.9300-03	.8604-03	.1000-02	.4031-04	.3354-04	.4448-04	.2700-01	.3220	543.7
61	4.0000	.85000	76.000	.1700-02	.1400-02	.1800-02	.7236-04	.6020-04	.8049-04	.4800-01	.5700	543.4
61	4.0000	.87500	77.000	.1100-02	.9000-03	.1300-02	.4911-04	.4085-04	.5465-04	.3300-01	.4270	544.8
61	4.0000	.90000	78.000	.1100-02	.8000-03	.1200-02	.4828-04	.4014-04	.5372-04	.3200-01	.4140	545.5
61	4.0000	.92500	79.000	.1300-02	.1100-02	.1500-02	.5846-04	.4861-04	.6505-04	.3900-01	.4790	545.3
61	4.0000	.95000	80.000	.2900-02	.2400-02	.3200-02	.262-03	.1049-03	.1405-03	.8400-01	.9780	546.1

DATE 07 OCT 75

OH-7A (AEDC V41B-B8A) HEATING DATA ON ORBITTER FUSELAGE PORT SIDE

PAGE 208

OH-7A (AEDC V41B-B8A) B62C12F10H16M127E52VBR19

(RVB002)

ORBITTER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
93	8.000	19.91	805.6	1350.	174.3	-1.000	97.80	.8300-01	3.697	3877.	.7077-04	.7876-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175 .2160-01
93	3.484	.4753-01	.2160-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H(910) BTU/ R FT ² SEC	H(101) BTU/ R FT ² SEC	H(11AM) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTMOT DEG. R /SEC	TM DEG. R
93	1.0000	.27500	1.0000	.1110-01	.9200-02	.1240-01	.5275-03	.4383-03	.5872-03	.3500	3.611	551.8
93	1.0000	.30000	2.0000	.1000-01	.8300-02	.1120-01	.4773-03	.3967-03	.5314-03	.3170	3.350	551.1
93	1.0000	.32500	3.0000	.8100-02	.6700-02	.9000-02	.3837-03	.3190-03	.4270-03	.2550	2.613	549.8
93	1.0000	.35000	4.0000	.8700-02	.7200-02	.9700-02	.4136-03	.3439-03	.4604-03	.2750	2.843	549.8
93	1.0000	.37500	5.0000	.9200-02	.7600-02	.1020-01	.4350-03	.3617-03	.4841-03	.2890	3.034	549.5
93	1.0000	.40000	6.0000	.9900-02	.8300-02	.1110-01	.4723-03	.3926-03	.5257-03	.3140	3.216	549.8
93	1.0000	.42500	7.0000	.9100-02	.7600-02	.1010-01	.4327-03	.3593-03	.4810-03	.2870	2.970	549.8
93	1.0000	.45000	8.0000	.1590-01	.1320-01	.1770-01	.7567-03	.6287-03	.8424-03	.5020	5.111	551.5
93	1.0000	.47500	9.0000	.1570-01	.1300-01	.1750-01	.7454-03	.6193-03	.8298-03	.4950	5.012	551.5
93	1.0000	.50000	10.000	.1470-01	.1220-01	.1630-01	.6973-03	.5796-03	.7762-03	.4630	4.677	550.6
93	1.0000	.52500	11.000	.1740-01	.1450-01	.1940-01	.8288-03	.6887-03	.9226-03	.5500	5.551	551.2
93	1.0000	.55000	12.000	.1970-01	.1640-01	.2190-01	.9369-03	.7781-03	.1042-02	.6210	6.212	551.4
93	1.0000	.60000	13.000	.2110-01	.1750-01	.2350-01	.1004-02	.8341-03	.1118-02	.6650	6.704	552.8
93	1.0000	.65000	14.000	.3270-01	.2710-01	.3640-01	.1553-02	.1290-02	.1730-02	1.028	10.36	553.4
93	1.0000	.70000	15.000	.6390-01	.5300-01	.7130-01	.3038-02	.2519-02	.3387-02	1.992	19.32	559.2
93	1.0000	.75000	16.000	.5340-01	.4430-01	.5950-01	.2537-02	.2104-02	.2829-02	1.662	16.69	560.0
93	1.0000	.80000	17.000	.2250-01	.1870-01	.2500-01	.1068-02	.8866-03	.1189-02	.7050	6.803	553.9
93	2.0000	.85000	18.000	.1180-01	.9800-02	.1310-01	.5588-03	.4642-03	.6272-03	.3700	4.320	552.7
93	2.0000	.90000	19.000	.1040-01	.8600-02	.1160-01	.4937-03	.4102-03	.5495-03	.3270	3.845	551.7
93	2.0000	.95000	20.000	.1060-01	.8800-02	.1180-01	.5048-03	.4196-03	.5619-03	.3350	3.940	550.7
93	2.0000	.42500	21.000	.2100-01	.1740-01	.2340-01	.9986-03	.8291-03	.1112-02	.6600	7.694	554.4
93	2.0000	.47800	22.000	.2010-01	.1670-01	.2230-01	.9535-03	.7920-03	.1062-02	.6310	7.000	552.9

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 209

04-74 (AEDC V41B-B8A) 862C12F10M16M127E52V8R19

(RVB002)

RUN NUMBER	TRA.L	X/L	T/C NO	H/REF R=0.5	H/REF R=1.0	H/REF R=TAW	H(101) FT2SEC	H(101) BTU/R	H(1AM) FT2SEC	QDOT BTU/ FT2SEC	O(101) DEG. R /SEC	TW DEG. R
93	2.0000	.53000	23.000	.3190-01	.2640-01	.3550-01	.1514-02	.1257-02	.1687-02	.9980	11.05	555.9
93	2.0000	.56700	24.000	.4020-01	.3340-01	.4480-01	.1911-02	.1586-02	.2129-02	1.258	13.59	556.7
93	2.1000	.62000	25.000	.7750-01	.6420-01	.8650-01	.3684-02	.3049-02	.4112-02	2.390	25.68	566.3
93	2.2000	.67000	26.000	.3560-01	.2960-01	.3970-01	.1693-02	.1405-02	.1886-02	1.115	12.04	556.3
93	2.3000	.70500	27.000	.1970-01	.1630-01	.2190-01	.9341-03	.7760-03	.1040-02	.6190	6.637	552.1
93	2.4000	.75000	28.000	.1150-01	.9500-02	.1280-01	.5449-03	.4530-03	.6064-03	.3630	3.969	549.4
93	2.5000	.80000	29.000	.1120-01	.9300-02	.1250-01	.5345-03	.4443-03	.5950-03	.3550	3.907	550.2
93	2.6000	.82400	30.000	.4000-02	.3400-02	.4500-02	.1917-03	.1593-03	.2133-03	.1280	1.770	549.8
93	2.7000	.86000	31.000	.2640-01	.2190-01	.2950-01	.1257-02	.1042-02	.1401-02	.8240	8.680	555.1
93	2.8000	.88400	32.000	.2150-01	.1780-01	.2390-01	.1020-02	.0462-03	.1137-02	.6700	7.443	558.6
93	2.9000	.90000	33.000	.1550-01	.1290-01	.1730-01	.7368-03	.6115-03	.8209-03	.4860	5.406	555.7
93	3.0000	.94000	34.000	.1260-01	.1040-01	.1400-01	.5980-03	.4966-03	.6659-03	.3950	4.712	553.8
93	3.1000	.96000	35.000	.1040-01	.8600-02	.1160-01	.4932-03	.4097-03	.5491-03	.3270	4.027	552.5
93	3.2000	.97500	36.000	.1140-01	.9500-02	.1270-01	.5420-03	.4502-03	.6034-03	.3590	4.193	552.4
93	3.3000	.99000	37.000	.1150-01	.9500-02	.1280-01	.5446-03	.4524-03	.6063-03	.3610	4.172	552.1
93	3.4000	.40000	38.000	.1450-01	.1210-01	.1620-01	.6897-03	.5730-03	.7679-03	.4570	5.339	552.1
93	3.5000	.41.000	39.000	.2270-01	.1880-01	.2520-01	.1077-02	.8943-03	.1193-02	.7130	8.366	552.8
93	3.6000	.42500	40.000	.2510-01	.2090-01	.2600-01	.1194-02	.9916-03	.1331-02	.790	9.288	555.1
93	3.7000	.43.000	41.000	.3820-01	.3170-01	.3110-01	.1325-02	.1507-02	.2024-02	.8750	9.953	554.2
93	3.8000	.44.000	42.000	.5180-01	.4300-01	.5780-01	.2463-02	.2042-02	.2745-02	1.615	17.85	559.3
93	3.9000	.45.000	43.000	.7240-01	.6000-01	.8080-01	.3442-02	.2851-02	.3843-02	2.242	26.03	563.7
93	4.0000	.46.000	44.000	.7240-01	.5990-01	.8080-01	.3438-02	.2845-02	.3838-02	2.225	24.51	567.5
93	4.1000	.47.000	45.000	.2860-01	.2380-01	.3190-01	.1361-02	.1130-02	.1515-02	.9000	3.738	553.3
93	4.2000	.48.000	46.000	.1550-01	.1290-01	.1730-01	.7389-03	.6142-03	.8225-03	.4910	5.192	550.5
93	4.3000	.49.000	47.000	.1020-01	.8530-02	.1140-01	.4865-02	.4045-03	.5414-03	.3240	3.562	549.3
93	4.4000	.50.000	48.000	.7600-02	.6300-02	.8400-02	.3605-03	.2998-03	.4012-02	.2400	2.603	549.0
93	4.5000	.51.000	49.000	.8300-02	.6900-02	.9300-02	.3955-03	.3286-03	.3589-03	.2130	2.293	549.4
93	4.6000	.52.000	50.000	.1220-01	.1010-01	.1360-01	.5804-03	.4820-03	.7453-03	.3840	4.729	553.1
93	4.7000	.53.000	51.000	.7600-02	.6300-02	.8400-02	.3606-03	.2795-03	.4016-03	.2390	3.307	553.3
93	4.8000	.54.000	52.000	.1200-01	.9900-02	.1330-01	.5693-03	.4726-03	.6341-03	.3760	4.900	554.6
93	4.9000	.55.000	53.000	.1420-01	.1180-01	.1580-01	.6755-03	.5009-03	.7523-03	.4460	4.497	554.2
93	5.0000	.56.000	54.000	.3410-01	.2820-01	.3800-01	.1619-02	.1340-02	.1807-02	1.050	11.87	566.2
93	5.1000	.57.000	55.000	.2600-01	.2160-01	.2930-01	.1237-02	.1025-02	.1380-02	.8070	9.376	562.7
93	5.2000	.58.000	56.000	.1970-01	.1630-01	.2190-01	.9342-03	.7745-03	.1042-02	.6120	7.116	560.1
93	5.3000	.59.000	57.000	.1550-01	.1090-01	.1470-01	.6253-03	.5191-03	.8189-03	.4830	5.930	558.2
93	5.4000	.60.000	58.000	.1690-01	.1410-01	.1890-01	.6055-03	.6689-03	.8973-03	.5310	6.917	555.8
93	5.5000	.61.000	59.000	.3050-01	.2530-01	.3400-01	.1449-02	.1211-02	.1615-02	.9510	12.36	558.8
93	5.6000	.62.000	60.000	.6790-01	.5620-01	.4920-01	.2097-02	.1730-02	.2338-02	1.372	17.84	560.5
93	5.7000	.63.000	61.000	.7740-01	.6400-01	.8050-01	.3225-02	.2670-02	.3600-02	2.091	27.10	566.6
93	5.8000	.64.000	62.000	.7740-01	.6400-01	.8050-01	.3225-02	.2670-02	.3600-02	2.091	27.10	566.6
93	5.9000	.65.000	63.000	.7740-01	.6400-01	.8050-01	.3225-02	.2670-02	.3600-02	2.091	27.10	566.6

DATE 07 OCT 75

OH-7A (AEDC V41B-82.1) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 210

(R125122)

OH-7A (AEDC V41B-88A) B62C12F10M16N127E52V8R19

RUN NUMBER	TRACE	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAM	H19101 BTU/ R FT2SEC	H1701 BTU/ R FT2SEC	H1701 BTU/ R FT2SEC	QOOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
93	4.0000	.45000	62.000	.5370-01	.4390-01	.5910-01	.2519-02	.2087-02	.2810-02	1.643	21.08	562.9
93	4.0000	.47500	63.000	.4500-01	.2700-01	.3620-01	.1545-02	.1282-02	.1722-02	1.016	12.54	557.7
93	4.0000	.50000	64.000	.1850-01	.1540-01	.2050-01	.8777-03	.7297-03	.9786-03	.5810	7.155	553.8
93	4.0000	.52500	65.000	.1420-01	.1180-01	.1580-01	.6729-03	.5590-03	.7492-03	.4460	5.494	552.5
93	4.0000	.55000	65.000	.1240-01	.1030-01	.1380-01	.5912-03	.4913-03	.6581-03	.3920	4.584	551.3
93	4.0000	.60000	67.000	.8300-02	.6900-02	.9200-02	.3949-03	.3283-03	.4395-03	.2730	2.950	549.4
93	4.0000	.65000	68.000	.7000-02	.5900-02	.7800-02	.3346-03	.2782-03	.3723-03	.2230	2.608	548.7
93	4.0000	.70000	69.000	.6100-02	.5000-02	.6700-02	.2981-03	.2396-03	.3203-03	.1920	2.135	548.2
93	4.0000	.75000	70.000	.4200-02	.3500-02	.4600-02	.1978-03	.1645-03	.2201-03	.1320	1.464	549.0
93	4.0000	.80000	75.000	.1600-02	.1300-02	.1800-02	.7682-04	.6385-04	.8550-04	.5100-01	.6130	550.1
93	4.0000	.85000	76.000	.3700-02	.3000-02	.4100-02	.1744-03	.1449-03	.1541-03	.1160	1.369	550.3
93	4.0000	.87500	77.000	.4000-02	.3300-02	.4500-02	.1903-03	.1561-03	.2119-03	.1260	1.645	552.5
93	4.0000	.90000	78.000	.5400-02	.4500-02	.6000-02	.2573-03	.2136-03	.2865-03	.1700	2.192	553.9
93	4.0000	.92500	79.000	.3100-02	.2600-02	.3500-02	.1477-03	.1227	.1645-03	.9800-01	1.204	553.2
93	4.0000	.95000	80.000	.2300-02	.1900-02	.2600-02	.1112-03	.9235-04	.1238-03	.7400-01	.8580	553.6

DATE 07 OCT 75

04-74 (AEDC V4) HEATING DATA: O, ORBITER FUSELAGE PORT SIDE

PAGE 211

04-74 (AEDC V4) HEATING DATA: O, ORBITER FUSELAGE PORT SIDE

(RVB002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. C	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
94	8.000	24.86	807.1	1352.	-168.7	1.000	98.00	.8300-01	3.704	3880.	.7080-04	.7898-07

RUN NUMBER	RN/L X10.6 /FT	STN NO R=
94	3.483	.0175 .2160-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H-9101 BTU/ R FT2SEC	H(TU) BTU/ R FT2SEC	H(TAH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TW DEG. R
94	1.0000	.27500	1.0000	.1550-01	.1290-01	.1730-01	.7389-03	.6137-03	.8228-03	.4900	5.051	553.9
94	1.0000	.30000	2.0000	.1310-01	.1090-01	.1460-01	.6226-03	.5173-03	.6932-03	.4130	4.364	553.1
94	1.0000	.32500	3.0000	.1070-01	.0900-02	.1200-01	.5111-03	.4250-03	.5693-03	.3400	3.475	552.2
94	1.0000	.35000	4.0000	.1170-01	.0900-02	.1300-01	.5546-03	.4608-03	.6174-03	.3680	3.801	552.6
94	1.0000	.37500	5.0000	.1200-01	.1000-01	.1340-01	.5719-03	.4752-03	.6367-03	.3800	3.975	552.5
94	1.0000	.40000	6.0000	.1220-01	.1010-01	.1360-01	.5801-03	.4821-03	.6458-03	.3860	3.942	552.3
94	1.0000	.42500	7.0000	.1840-01	.1530-01	.2050-01	.8741-03	.7260-03	.734-03	.5790	5.973	554.0
94	1.0000	.45000	8.0000	.1850-01	.1540-01	.2070-01	.8839-03	.7342-03	.9843-03	.5860	5.957	553.9
94	1.0000	.47500	9.0000	.1830-01	.1520-01	.2040-01	.8702-03	.7228-03	.9690-03	.5770	5.839	553.6
94	1.0000	.50000	10.0000	.2240-01	.1850-01	.2500-01	.1066-02	.8857-03	.1187-02	.7070	7.127	554.1
94	1.0000	.52500	11.0000	.2150-01	.1780-01	.2390-01	.1022-02	.8490-03	.1138-02	.6770	6.825	553.9
94	1.0000	.55000	12.0000	.2350-01	.1950-01	.2620-01	.1120-02	.9303-03	.1247-02	.7420	7.414	555.5
94	1.0000	.60000	13.0000	.3080-01	.2560-01	.3430-01	.1465-02	.1218-02	.1633-02	.9700	9.763	558.8
94	1.0000	.65000	14.0000	.5570-01	.4620-01	.6210-01	.2852-02	.2200-02	.2955-02	1.745	17.54	565.3
94	1.0000	.70000	15.0000	.7520-01	.6230-01	.8390-01	.357-02	.2953-02	.3932-02	2.331	22.54	560.1
94	1.0000	.75000	16.0000	.4590-01	.3810-01	.5120-01	.2164-02	.1811-02	.2434-02	1.434	14.41	556.3
94	1.0000	.80000	17.0000	.2270-01	.1880-01	.2530-01	.1081-02	.8970-03	.1204-02	.7140	6.871	555.4
94	2.0000	.28500	18.0000	.1490-01	.1240-01	.1660-01	.7093-03	.5889-03	.7910-03	.4690	5.469	554.6
94	2.0000	.33700	19.0000	.1410-01	.1170-01	.1570-01	.6711-03	.5577-03	.7479-03	.4450	5.214	555.7
94	2.0000	.39000	20.0000	.2100-01	.1740-01	.2340-01	.2984-03	.8289-03	.1112-02	.6600	7.735	556.3
94	2.0000	.42600	21.0000	.2470-01	.2050-01	.2750-01	.1174-02	.9749-03	.1308-02	.7760	9.040	556.2
94	2.0000	.47800	22.0000	.2820-01	.2340-01	.3140-01	.1342-02	.1114-02	.1495-02	.8870	9.815	

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

PAGE 212

(R18002)

OH-7N (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-7N (AEDC V41B-88A) B82C12F10M16H127E52V8R19

RUN NUMBER	TRAFFIC	X/L	T/C NO	H/HREF R=0.3	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R	H1T0 BTU/ R	H1TAN F12SEC	QDOT BTU/ F12SEC	DTNOT DEG. R	TH DEG. R
54	2.0000	.53000	23.000	.4300-01	.3570-01	.4790-01	.2046-02	.1897-02	.2281-02	1.344	14.85	559.8
54	2.0000	.56700	24.000	.7910-01	.6540-01	.8820-01	.3762-02	.3114-02	.4199-02	2.446	26.28	566.7
54	2.0000	.62000	25.000	.7030-01	.5820-01	.7840-01	.3343-02	.2768-02	.3730-02	2.176	23.39	565.9
54	2.0000	.67000	26.000	.2500-01	.2070-01	.2780-01	.1188-02	.9862-03	.1323-02	.7850	8.484	555.7
54	2.0000	.70500	27.000	.1720-01	.1430-01	.1910-01	.8165-03	.6781-03	.9092-03	.5410	5.794	554.1
54	2.0000	.75000	28.000	.1210-01	.1010-01	.1350-01	.5767-03	.4792-03	.6421-03	.3630	4.187	552.5
54	2.0000	.80000	29.000	.1230-01	.1020-01	.1370-01	.5856-03	.4865-03	.6520-03	.3890	4.269	552.9
54	2.0000	.82400	30.000	.4700-02	.3900-02	.5200-02	.2210-03	.1843-03	.2470-03	1.470	2.041	553.1
54	3.0000	.20000	31.000	.3230-01	.2680-01	.3600-01	.1536-02	.1273-02	.1713-02	1.006	10.58	561.5
54	3.0000	.22500	32.000	.2810-01	.2330-01	.3130-01	.1336-02	.1108-02	.1489-02	.8770	9.733	560.6
54	3.0000	.25000	33.000	.2050-01	.1700-01	.2280-01	.9752-03	.8091-03	.1087-02	.6420	7.135	558.5
54	3.0000	.27300	34.000	.1610-01	.1330-01	.1790-01	.7641-03	.6343-03	.8513-03	.5050	6.006	556.4
54	3.0000	.30000	35.000	.1410-01	.1170-01	.1570-01	.6711-03	.5572-03	.7475-03	.4440	5.463	555.3
54	3.0000	.32500	36.000	.1500-01	.1250-01	.1670-01	.7143-03	.5931-03	.7956-03	.4720	5.507	555.5
54	3.0000	.35000	37.000	.1530-01	.1270-01	.1710-01	.7299-03	.6060-03	.8129-03	.4830	5.573	555.1
54	3.0000	.37500	38.000	.2580-01	.2230-01	.2990-01	.1277-02	.1060-02	.1423-02	.8430	9.819	556.9
54	3.0000	.40000	39.000	.3050-01	.2530-01	.3400-01	.1453-02	.1206-02	.1619-02	.9590	11.24	556.6
54	3.0000	.42500	40.000	.3450-01	.2860-01	.3850-01	.1642-02	.1362-02	.1830-02	1.079	12.68	559.9
54	3.0000	.45000	41.000	.4160-01	.3450-01	.4640-01	.1982-02	.1644-02	.2209-02	1.303	14.77	559.4
54	3.0000	.47500	42.000	.5570-01	.4620-01	.6210-01	.2651-02	.2197-02	.2956-02	1.734	19.13	562.7
54	3.0000	.50000	43.000	.8190-01	.6770-01	.9140-01	.3896-02	.3223-02	.4351-02	2.520	27.71	570.0
54	3.0000	.52500	44.000	.7490-01	.6200-01	.8360-01	.3566-02	.2952-02	.3980-02	2.316	26.84	567.4
54	3.0000	.55000	45.000	.5410-01	.4480-01	.6030-01	.2573-02	.2133-02	.2870-02	1.686	18.61	561.7
54	3.0000	.60000	46.000	.2020-01	.1680-01	.2250-01	.9603-03	.7975-03	.1070-02	.6360	6.873	554.7
54	3.0000	.65000	47.000	.1230-01	.1020-01	.1370-01	.5869-03	.4877-03	.6534-03	.3900	4.121	552.2
54	3.0000	.70000	48.000	.7900-02	.6600-02	.8800-02	.3780-03	.3141-03	.4207-03	.2510	2.763	551.5
54	3.0000	.75000	49.000	.6600-02	.5500-02	.7300-02	.3129-03	.2600-03	.3483-03	.2080	2.253	551.7
54	3.0000	.80000	50.000	.5100-02	.4300-02	.5700-02	.2449-03	.2035-03	.2727-03	.1630	1.736	552.4
54	3.0000	.85000	51.000	.5700-02	.5600-02	.7500-02	.3207-03	.2664-03	.3571-03	.2130	2.618	553.9
54	3.0000	.87500	52.000	.1100-01	.9100-02	.1220-01	.5215-03	.4330-03	.5808-03	.3450	4.245	555.4
54	3.0000	.90000	53.000	.1700-01	.1410-01	.1890-01	.8085-03	.6708-03	.9010-03	.5330	7.363	558.1
54	3.0000	.92500	54.000	.2290-01	.1900-01	.2500-01	.1098-02	.9024-03	.1212-02	.7160	9.315	558.6
54	3.0000	.95000	55.000	.2240-01	.1860-01	.2500-01	.1067-02	.8856-03	.1189-02	.7030	7.071	558.0
54	3.0000	.20000	71.000	.3970-01	.3290-01	.4440-01	.1890-02	.1564-02	.2111-02	1.225	13.83	568.6
54	4.0000	.22500	72.000	.3090-01	.2560-01	.3450-01	.1471-02	.1219-02	.1641-02	.9590	11.13	564.7
54	4.0000	.25000	73.000	.2440-01	.2020-01	.2720-01	.1160-02	.9617-03	.1294-02	.7590	8.824	562.3
54	4.0000	.27500	74.000	.1990-01	.1650-01	.2220-01	.9480-03	.7860-03	.1057-02	.6220	7.628	561.1
54	4.0000	.30000	75.000	.1630-01	.1350-01	.1810-01	.7737-03	.6419-03	.8071-03	.5100	6.632	558.0
54	4.0000	.32500	76.000	.2770-01	.2300-01	.3040-01	.1319-02	.1094-02	.1471-02	.8650	11.25	560.8
54	4.0000	.35000	77.000	.4470-01	.3700-01	.4980-01	.2126-02	.1761-02	.2372-02	1.387	17.99	554.3
54	4.0000	.37500	78.000	.7130-01	.5900-01	.7960-01	.3392-02	.2806-02	.3787-02	2.197	28.42	569.2
54	4.0000	.40000	79.000	.6970-01	.5770-01	.7790-01	.3319-02	.2744-02	.3707-02	2.143	27.70	571.1
54	4.0000	.42500	80.000	.4670-01	.3870-01	.5210-01	.2224-02	.1843-02	.2481-02	1.455	18.89	562.9

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 213

OH-74 (AEDC V41B-B8A) B62C12F10M16H127E52V8R19

(RV3002)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9T0) BTU/ R F12SEC	H(1T0) BTU/ R F12SEC	H(TAN) BTU/ R F12SEC	QDOT BTU/ F12SEC	DT40T DEG. R /SEC	TH DEG. R
94	4.0000	.45000	62.000	.2610-01	.2160-01	.2910-01	.1241-02	.1030-02	.1383-02	.8180	10.52	558.1
94	4.0000	.47500	63.000	.1860-01	.1540-01	.2070-01	.3931-03	.7330-03	.9840-03	.5830	7.371	557.0
94	4.0000	.50000	64.000	.1210-01	.1010-01	.1350-01	.5781-03	.4801-03	.6439-03	.3830	4.712	554.7
94	4.0000	.52500	65.000	.9900-02	.8200-02	.1100-01	.4713-03	.3914-03	.5248-03	.3120	3.846	554.1
94	4.0000	.55000	66.000	.8400-02	.7000-02	.9400-02	.4020-03	.3340-03	.4475-03	.2670	3.115	552.9
94	4.0000	.60000	67.000	.6400-02	.5400-02	.7200-02	.3059-03	.2551-03	.3416-03	.2040	2.289	551.5
94	4.0000	.65000	68.000	.4700-02	.3900-02	.5200-02	.2223-03	.1848-03	.2474-03	.1480	1.729	551.1
94	4.0000	.70000	69.000	.3800-02	.3200-02	.4200-02	.1810-03	.1505-03	.2014-03	.1210	1.339	550.4
94	4.0000	.75000	70.000	.2700-02	.1900-02	.2500-02	.1083-03	.9003-04	.1206-03	.7200-01	.8000	551.6
94	4.0000	.80000	75.000	.2400-02	.2000-02	.2600-02	.1126-03	.9356-04	.1254-03	.7500-01	.8950	553.9
94	4.0000	.85000	76.000	.2700-02	.2300-02	.3000-02	.1295-03	.1075-03	.1442-03	.8600-01	1.010	554.7
94	4.0000	.87500	77.000	.2900-02	.2500-02	.3200-02	.1391-03	.1194-03	.1516-03	.1140	1.611	398.1
94	4.0000	.90000	78.000	.5300-02	.4400-02	.5900-02	.2513-03	.2086-03	.2799-03	.1660	2.137	556.2
94	4.0000	.92500	79.000	.9500-02	.7800-02	.1050-01	.4498-03	.3732-03	.5012-03	.2960	3.640	558.3
94	4.0000	.95000	80.000	.1120-01	.9300-02	.1250-01	.5336-03	.4427-03	.5947-03	.3510	4.091	558.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 214

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V6R19

(RVB002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V F1/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
95	8.000	29.83	808.3	1353.	-89.98	1.000	98.00	.8300-01	3.709	3881.	.7085-04	.7893-07

RUN NUMBER	RN/L	HREF BTU/ R FT2SEC	STN NO R= /FT
95	3.484	.4763-01	.2159-01

TEST DATA

RUN NUMBER	TRACE	X/L	W/HREF R=0.9	H/HREF R=1.0	H/HREF R=1.0	H1G10 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
95	1.0000	.27500	.1500-01	.1250-01	.1670-01	.7154-03	.5946-03	.7231-03	.4760	4.916	551.9
95	1.0000	.30000	.1350-01	.1130-01	.1520-01	.6497-03	.5400-03	.7231-03	.4330	4.575	551.5
95	1.0000	.32500	.1180-01	.0980-02	.1320-01	.5636-03	.4685-03	.6272-03	.3760	3.845	550.8
95	1.0000	.35000	.1310-01	.1090-01	.1450-01	.6223-03	.5173-03	.6925-03	.4150	4.286	550.7
95	1.0000	.37500	.1280-01	.1060-01	.1420-01	.6075-03	.5051-03	.6760-03	.4050	4.245	550.4
95	1.0000	.40000	.2000-01	.1660-01	.2220-01	.9510-03	.7903-03	.1059-02	.6330	6.468	552.4
95	1.0000	.42500	.1860-01	.1550-01	.2070-01	.8871-03	.7371-03	.9875-03	.5900	6.085	552.7
95	1.0000	.45000	.2170-01	.1800-01	.2420-01	.1034-02	.8593-03	.1152-02	.6870	6.986	553.6
95	1.0000	.47500	.1680-01	.1390-01	.1870-01	.7995-03	.6644-03	.8900-03	.5320	5.387	552.5
95	1.0000	.50000	.2060-01	.1710-01	.2300-01	.9827-03	.8165-03	.1094-02	.6530	6.582	553.2
95	1.0000	.52500	.2780-01	.2310-01	.3090-01	.1323-02	.1098-02	.1473-02	.8770	8.838	554.4
95	1.0000	.55000	.2960-01	.2460-01	.3300-01	.1412-02	.1173-02	.1572-02	.9370	9.353	554.2
95	1.0000	.60000	.4860-01	.4030-01	.5420-01	.2314-02	.1919-02	.2580-02	1.520	15.26	560.9
95	1.0000	.65000	.4810-01	.3990-01	.5360-01	.2289-02	.1898-02	.2551-02	1.506	15.13	559.8
95	1.0000	.70000	.4140-01	.3430-01	.4610-01	.1971-02	.1636-02	.2197-02	1.299	12.60	558.9
95	1.0000	.75000	.2620-01	.2170-01	.2920-01	.1247-02	.1036-02	.1389-02	.8260	8.317	555.4
95	1.0000	.80000	.1490	.1240-01	.1660-01	.7118-03	.5912-03	.7925-03	.4720	4.547	554.6
95	1.0000	.85000	.1610-01	.1340-01	.1790-01	.7656-03	.6360-03	.8574-03	.5090	5.936	553.3
95	2.0000	.28500	.1610-01	.1340-01	.1790-01	.7656-03	.6360-03	.8574-03	.5090	5.936	553.3
95	2.0000	.33700	.1420-01	.1180-01	.1580-01	.6752-03	.5611-03	.7516-03	.4490	5.276	552.1
95	2.0000	.39000	.2640-01	.2190-01	.2940-01	.1256-02	.1043-02	.1398-02	.8330	9.771	554.1
95	2.0000	.42600	.3160-01	.2630-01	.3520-01	.1506-02	.1250-02	.1678-02	.9960	11.60	556.6
95	2.0000	.47800	.3980-01	.3300-01	.4440-01	.1896-02	.1574-02	.2113-02	1.252	13.85	557.6

DATE 07 OCT 75

OH-7A (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 215

(RYB002)

OH-7A (AEDC V41B-B8A) B62C12F10H16A.27E5E2V8R19

RUN NUMBER	TRA.E	X/L	T/C NO	H/HREF R=0.5	H/HREF R=1.0	H/HREF R=TAN	H1ST0 BTU/ R	H1T0 FT2SEC	H1TAH BTU/ R	QOOT BTU/	DTWOT DEG. R	TH DEG. R
95	2.0000	.53000	23.000	.5290-01	.4390-01	.5900-01	.2521-02	.2090-02	.2811-02	1.652	18.24	562.3
95	2.0000	.56700	24.000	.4460-01	.3700-01	.4970-01	.2122-02	.1760-02	.2365-02	1.396	15.05	559.9
95	2.0000	.62000	25.000	.2650-01	.2200-01	.2950-01	.1260-02	.1046-02	.1404-02	.8340	9.012	555.8
95	2.0000	.67000	26.000	.1710-01	.1420-01	.1910-01	.8153-03	.6772-03	.9079-03	.5410	5.849	554.2
95	2.0000	.70500	27.000	.1280-01	.1070-01	.1430-01	.6109-03	.5076-03	.6801-03	.4060	4.353	552.7
95	2.0000	.75000	28.000	.9677-02	.8200-02	.1100-01	.4704-03	.3910-03	.5236-03	.3130	3.424	551.9
95	2.0000	.80000	29.000	.1300-02	.6500-02	.8800-02	.3748-03	.3115-03	.4171-03	.2500	2.742	551.8
95	2.0000	.82400	30.000	.1900-02	.1500-02	.2100-02	.8813-04	.7322-04	.9812-04	.5900-01	.8120	553.2
95	3.0000	.20000	31.000	.3380-01	.2800-01	.3770-01	.1609-02	.1333-02	.1794-02	1.052	11.06	563.5
95	3.0000	.22500	32.000	.2890-01	.2400-01	.3220-01	.1376-02	.1141-02	.1534-02	.9040	10.04	560.5
95	3.0000	.25000	33.000	.2240-01	.1850-01	.2490-01	.1066-02	.8846-03	.1187-02	.7040	7.834	556.8
95	3.0000	.27500	34.000	.1720-01	.1430-01	.1910-01	.8181-03	.6796-03	.9109-03	.5430	6.473	553.8
95	3.0000	.30000	35.000	.1610-01	.1340-01	.1790-01	.7688-03	.6372-03	.8537-03	.5100	6.284	552.7
95	3.0000	.32500	35.000	.1630-01	.1350-01	.1810-01	.7757-03	.6446-03	.8635-03	.5160	6.028	552.2
95	3.0000	.35000	37.000	.2550-01	.2120-01	.2840-01	.1215-02	.1009-02	.1353-02	.8050	9.305	554.2
95	3.0000	.37500	38.000	.3340-01	.2770-01	.3720-01	.1589-02	.1319-02	.1770-02	1.052	12.26	555.9
95	3.0000	.40000	39.000	.3740-01	.3100-01	.4160-01	.1779-02	.1477-02	.1982-02	1.176	13.77	556.8
95	3.0000	.42500	40.000	.3320-01	.2760-01	.3700-01	.1582-02	.1313-02	.1763-02	1.044	12.29	557.9
95	3.0000	.45000	41.000	.5580-01	.4630-01	.6220-01	.2658-02	.2203-02	.2963-02	1.745	19.76	561.1
95	3.0000	.47500	42.000	.1040-01	.8700-02	.1494-01	.2110-02	.1750-02	.2352-02	1.387	15.32	560.3
95	3.0000	.50000	43.000	.3240-01	.2690-01	.3610-01	.1543-02	.1281-02	.1719-02	1.020	11.29	556.7
95	3.0000	.52500	44.000	.2370-01	.1970-01	.2630-01	.1127-02	.9359-03	.1255-02	.7480	8.723	554.1
95	3.0000	.55000	45.000	.1830-01	.1520-01	.2040-01	.8708-03	.7234-03	.9695-03	.5780	6.411	553.6
95	3.0000	.60000	46.000	.6800-02	.5700-02	.7600-02	.3254-03	.2705-03	.3621-03	.3310	3.586	551.5
95	3.0000	.65000	47.000	.5500-02	.4600-02	.6100-02	.2612-03	.2172-03	.2907-03	.2170	2.296	550.4
95	3.0000	.70000	48.000	.4600-02	.3800-02	.5100-02	.2184-03	.1816-03	.2430-03	.1740	1.916	550.5
95	3.0000	.75000	49.000	.3120-02	.2500-02	.3400-02	.160-03	.1214-03	.1625-03	.1460	1.579	550.3
95	3.0000	.80000	50.000	.4120-02	.3400-02	.4100-02	.1768-03	.1468-03	.1968-03	1.039	1.039	550.7
95	3.0000	.85000	51.000	.3700-02	.3100-02	.4100-02	.1963-03	.1630-03	.2186-03	1.170	1.443	554.5
95	3.0000	.87500	52.000	.4120-02	.3400-02	.4400-02	.1864-03	.1547-03	.2077-03	1.300	1.600	555.5
95	3.0000	.90000	53.000	.3900-02	.3200-02	.4400-02	.1864-03	.1547-03	.2077-03	1.230	1.705	556.5
95	3.0000	.92500	54.000	.5800-02	.4800-02	.6500-02	.2781-03	.2308-03	.3098-03	.1840	2.394	556.5
95	3.0000	.95000	55.000	.6700-02	.5600-02	.7500-02	.3194-03	.2652-03	.3557-03	.2120	2.130	555.3
95	4.0000	.20000	71.000	.4030-01	.3340-01	.4510-01	.1921-02	.1589-02	.2146-02	1.243	14.01	570.9
95	4.0000	.22500	72.000	.3100-01	.2570-01	.3460-01	.1477-02	.1223-02	.1647-02	.9640	11.19	564.6
95	4.0000	.25000	73.000	.2360-01	.1960-01	.2630-01	.1126-02	.9333-03	.1255-02	.7400	8.601	560.5
95	4.0000	.27500	74.000	.2310-01	.1910-01	.2570-01	.1099-02	.9116-03	.1225-02	.7240	8.893	558.9
95	4.0000	.30000	56.000	.2110-01	.1760-01	.2360-01	.1007-02	.8362-03	.1172-02	.6650	8.681	556.0
95	4.0000	.32500	57.000	.3950-01	.3270-01	.4400-01	.1880-02	.1558-02	.2096-02	1.232	15.99	562.4
95	4.0000	.35000	58.000	.5040-01	.4170-01	.5620-01	.2399-02	.186-02	.2677-02	1.552	20.23	566.7
95	4.0000	.37500	59.000	.3480-01	.2880-01	.3890-01	.1657-02	.1374-02	.1846-02	1.090	14.17	559.7
95	4.0000	.40000	60.000	.2680-01	.2220-01	.2980-01	.1276-02	.1059-02	.1421-02	.8420	10.95	558.0
95	4.0000	.42500	61.000	.2020-01	.1680-01	.2250-01	.9617-03	.7985-03	.1071-02	.6370	8.296	555.6

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 216

(RVB002)

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1910 BTU/ R F12SEC	H110 BTU/ R F12SEC	H11AH BTU/ R F12SEC	QDOT BTU/ F12SEC	DTMOT DEG. R /SEC	TW DEG. R
95	4.0000	.45000	62.000	.1230-01	.1020-01	.1370-01	.5864-03	.4871-03	.6530-03	.3890	5.016	594.0
95	4.0000	.47500	63.000	.8900-02	.7400-02	.9900-02	.4248-03	.3530-03	.4730-03	.2820	3.577	553.2
95	4.0000	.50000	64.000	.6100-02	.5000-02	.6800-02	.2890-03	.2402-03	.3216-03	.1920	2.372	551.9
95	4.0000	.52500	65.000	.5300-02	.4400-02	.5900-02	.2509-03	.2086-03	.2793-03	.1670	2.061	551.5
95	4.0000	.55000	66.000	.4500-02	.3800-02	.5000-02	.2151-03	.1788-03	.2394-03	.1430	1.675	551.0
95	4.0000	.60000	67.000	.3100-02	.2600-02	.3500-02	.1488-03	.1237-03	.1655-03	.9900-01	1.115	549.7
95	4.0000	.65000	68.000	.2000-02	.1700-02	.2300-02	.9682-04	.8051-04	.1077-03	.6500-01	.7560	549.8
95	4.0000	.70000	69.000	.1300-02	.1100-02	.1500-02	.6283-04	.5226-04	.6990-04	.4200-01	.4670	549.9
95	4.0000	.75000	70.000	.1600-02	.1300-02	.1800-02	.7694-04	.6398-04	.8562-04	.5100-01	.5710	551.7
95	4.0000	.80000	75.000	.2100-02	.1700-02	.2300-02	.9932-04	.8255-04	.1106-03	.6600-01	.7930	553.6
95	4.0000	.85000	76.000	.1800-02	.1500-02	.2000-02	.8383-04	.6965-04	.9334-04	.5600-01	.6570	554.1
95	4.0000	.87500	77.000	.3000-02	.2500-02	.3400-02	.1448-03	.1203-03	.1612-03	.9600-01	1.253	555.0
95	4.0000	.90000	78.000	.3100-02	.2600-02	.3500-02	.1492-03	.1239-03	.1661-03	.9900-01	1.273	555.6
95	4.0000	.92500	79.000	.2900-02	.2400-02	.3300-02	.1395-03	.1158-03	.1554-03	.9200-01	1.136	555.6
95	4.0000	.95000	80.000	.3000-02	.2500-02	.3400-02	.1434-03	.1191-03	.1597-03	.9500-01	1.107	555.6

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
96	8.000	34.95	807.0	1351.	158.8	1.000	97.90	.8300-01	3.703	3879.	.7084-04	.7882-07

RUN NUMBER	RM/L X10 6	REF BTU/ R	STN NO R=
96	3.486	.4758-01	.2159-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=1.0	H(910) BTU/ R	H(10) BTU/ R	H(TAH) BTU/ R	QDOT BTU/	DTWOT DEG. R	TH DEG. R
96	1.0000	.275	1.0000	.1600-01	.1330-01	.1780-01	.7623-03	.6334-03	.8486-03	.5060	5.223	552.0
96	1.0000	.300	2.0000	.1450-01	.1200-01	.1610-01	.6878-03	.5715-03	.7657-03	.4570	4.826	551.9
96	1.0000	.32500	3.0000	.1170-01	.9700-02	.1300-01	.5557-03	.4618-03	.6187-03	.3690	3.776	551.7
96	1.0000	.35000	4.0000	.1350-01	.1120-01	.1500-01	.6404-03	.5321-03	.7129-03	.4250	4.390	551.5
96	1.0000	.37500	5.0000	.1880-01	.1560-01	.2090-01	.8924-03	.7413-03	.9936-03	.5920	6.189	552.9
96	1.0000	.40000	6.0000	.2130-01	.1820-01	.2440-01	.1042-02	.8652-03	.1160-02	.6900	7.052	553.3
96	1.0000	.42500	7.0000	.1710-01	.1420-01	.1910-01	.8195-03	.6774-03	.9081-03	.5400	5.573	553.4
96	1.0000	.45000	8.0000	.1960-01	.1630-01	.2180-01	.9322-03	.7742-03	.1018-02	.6170	6.279	553.8
96	1.0000	.47500	9.0000	.2450-01	.2040-01	.2730-01	.1167-02	.9688-03	.1300-02	.7710	7.805	554.9
96	1.0000	.50000	10.000	.2340-01	.1940-01	.2600-01	.1113-02	.9240-03	.1239-02	.7360	7.419	554.0
96	1.0000	.52500	11.000	.1700-01	.2240-01	.3010-01	.1285-02	.1057-02	.1431-02	.8510	8.571	553.8
96	1.0000	.55000	12.000	.3450-01	.2950-01	.3950-01	.1693-02	.1406-02	.1985-02	1.120	11.18	554.5
96	1.0000	.60000	13.000	.2940-01	.2440-01	.3270-01	.1397-02	.1160-02	.1556-02	.9220	9.285	555.7
96	1.0000	.65000	14.000	.4440-01	.3680-01	.4940-01	.2110-02	.1751-02	.2352-02	1.390	13.98	557.5
96	1.0000	.70000	15.000	.2180-01	.1810-01	.2430-01	.1040-02	.8633-03	.1159-02	.6880	6.684	554.4
96	1.0000	.75000	16.000	.8500-02	.7100-02	.9500-02	.4013-03	.3368-03	.4511-03	.2690	2.716	551.6
96	1.0000	.80000	17.000	.2600-02	.2270-02	.2900-02	.1247-03	.1037-03	.1388-03	.8300-01	.8000	551.1
96	1.0000	.85000	18.000	.1730-01	.1440-01	.1930-01	.8229-03	.6834-03	.3104-03	.5450	6.354	554.0
96	2.0000	.26500	19.000	.1630-01	.1350-01	.1810-01	.7754-03	.6440-03	.8635-03	.5130	6.022	553.8
96	2.0000	.33700	19.000	.2760-01	.2310-01	.3100-01	.1323-02	.1098-02	.1473-02	.8740	10.24	555.5
96	2.0000	.39000	20.000	.2220-01	.1840-01	.2470-01	.1054-02	.8755-03	.1175-02	.6970	8.126	555.0
96	2.0000	.42600	21.000	.2220-01	.1840-01	.2470-01	.1054-02	.8755-03	.1175-02	.6970	8.126	555.0
96	2.0000	.47800	22.000	.3210-01	.2660-01	.3570-01	.1526-02	.1267-02	.1700-02	1.006	11.14	556.5

DATE 07 OCT 75

OH-7A (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 218

(RV8002)

OH-7A (AEDC V41B-BBA) B62C12F10H16W127E52V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTAOT DEG. R /SEC	TM DEG. R
96	2.0000	53000	23.000	.3780-01	.3130-01	.4210-01	.1798-02	.1491-02	.2004-02	1.192	13.06	558.7
96	2.0000	53700	24.000	.2580-01	.2140-01	.2870-01	.1226-02	.1017-02	.1365-02	.8090	8.743	555.7
96	2.0000	62000	25.000	.1980-01	.1650-01	.2210-01	.9431-03	.7831-03	.1050-02	.6240	6.742	554.6
96	2.0000	67000	26.000	.9600-02	.8000-02	.1070-01	.4575-03	.3802-03	.5093-03	.3040	3.291	551.5
96	2.0000	70500	27.000	.7500-02	.6200-02	.8300-02	.3567-03	.2965-03	.3970-03	.2370	2.548	550.1
96	2.0000	75000	28.000	.4300-02	.3600-02	.4800-02	.2044-03	.1700-03	.2275-03	.1360	1.492	549.2
96	2.0000	80000	29.000	.3000-02	.2500-02	.3300-02	.1409-03	.1171-03	.1567-03	.9400-01	1.032	549.5
96	2.0000	82400	30.000	.1000-02	.9000-03	.1200-02	.4951-04	.4114-04	.5511-04	.3300-01	.4570	551.3
96	3.0000	20000	31.000	.3490-01	.2900-01	.3900-01	.1662-02	.1378-02	.1853-02	1.089	11.46	550.6
96	3.0000	22500	32.000	.2910-01	.2420-01	.3250-01	.1386-02	.1149-02	.1545-02	.9100	10.11	559.2
96	3.0000	25000	33.000	.2260-01	.1880-01	.2520-01	.1077-02	.8938-03	.1200-02	.7100	7.894	556.9
96	3.0000	27500	34.000	.1800-01	.1490-01	.2000-01	.8556-03	.7104-03	.9530-03	.5650	6.735	555.0
96	3.0000	30000	35.000	.1470-01	.1220-01	.1640-01	.6988-03	.5804-03	.7781-03	.4630	5.699	553.7
96	3.0000	32500	36.000	.2160-01	.1800-01	.2410-01	.1029-02	.8542-03	.1146-02	.6800	7.935	554.5
96	3.0000	35000	37.000	.3120-01	.2590-01	.3480-01	.1487-02	.1234-02	.1656-02	.9800	11.30	556.5
96	3.0000	37500	38.000	.3120-01	.2590-01	.3470-01	.1483-02	.1230-02	.1652-02	.9770	11.37	557.3
96	3.0000	40000	39.000	.2110-01	.1750-01	.2350-01	.1003-02	.8328-03	.1117-02	.6640	7.782	554.1
96	3.0000	42500	40.000	.4320-01	.3580-01	.4820-01	.2055-02	.1703-02	.2291-02	1.344	15.79	561.6
96	3.0000	45000	41.000	.3440-01	.2860-01	.3830-01	.1637-02	.1358-02	.1824-02	1.078	12.24	557.3
96	3.0000	47500	42.000	.3210-01	.2660-01	.3580-01	.1527-02	.1267-02	.1702-02	1.005	11.12	557.7
96	3.0000	50000	43.000	.2730-01	.2270-01	.3050-01	.1301-02	.1079-02	.1449-02	.8580	9.492	556.6
96	3.0000	52500	44.000	.1770-01	.1470-01	.1970-01	.8404-03	.6980-03	.9359-03	.5660	6.492	553.8
96	3.0000	55000	45.000	.1330-01	.1110-01	.1480-01	.6328-03	.5257-03	.7045-03	.4200	4.658	552.3
96	3.0000	60000	46.000	.7800-02	.6500-02	.8700-02	.3715-03	.3088-03	.4134-03	.2470	2.679	550.1
96	3.0000	65000	47.000	.5200-02	.4300-02	.5800-02	.2485-03	.2066-03	.2765-03	.1660	1.753	548.5
96	3.0000	70000	48.000	.4000-02	.3300-02	.4400-02	.1896-03	.1577-03	.2109-03	.1270	1.392	549.2
96	3.0000	75000	49.000	.2700-02	.2200-02	.3000-02	.1278-03	.1062-03	.1422-03	.8500-01	.9240	548.7
96	3.0000	80000	50.000	.2700-02	.2200-02	.3000-02	.1287-03	.1070-03	.1433-03	.8600-01	.9160	548.8
96	3.0000	85000	51.000	.1800-02	.1500-02	.2000-02	.8644-04	.7183-04	.9624-04	.5700-01	.7080	551.9
96	3.0000	87500	52.000	.1500-02	.1300-02	.1700-02	.7340-04	.6098-04	.8172-04	.4900-01	.6000	552.4
96	3.0000	90000	53.000	.1500-02	.1200-02	.1600-02	.7016-04	.5829-04	.7812-04	.4700-01	.6450	552.9
96	3.0000	92500	54.000	.1700-02	.1400-02	.1900-02	.8069-04	.6703-04	.8985-04	.5300-01	.6980	553.0
96	3.0000	95000	55.000	.2300-02	.1900-02	.2500-02	.1071-03	.8900-04	.1193-03	.7100-01	.7160	552.7
96	3.0000	20000	71.000	.3860-01	.3200-01	.4310-01	.1837-02	.1520-02	.2051-02	1.191	13.45	567.5
96	4.0000	22500	72.000	.2950-01	.2440-01	.3290-01	.1402-02	.1162-02	.1554-02	.9150	10.63	563.3
96	4.0000	25000	73.000	.2270-01	.1880-01	.2530-01	.1078-02	.8940-03	.1202-02	.7050	8.214	560.8
96	4.0000	27500	74.000	.2720-01	.2260-01	.3040-01	.1295-02	.1074-02	.1444-02	.8480	10.40	561.4
96	4.0000	30000	56.000	.2650-01	.2200-01	.2960-01	.1262-02	.1047-02	.1476-02	.8300	10.79	558.5
96	4.0000	32500	57.000	.3810-01	.3150-01	.4240-01	.1010-02	.1500-02	.2019-02	1.182	15.34	563.1
96	4.0000	35000	58.000	.2880-01	.2390-01	.3210-01	.1369-02	.1135-02	.1526-02	.8970	11.66	560.4
96	4.0000	37500	59.000	.2840-01	.2350-01	.3160-01	.1369-02	.1119-02	.1504-02	.8860	11.52	559.5
96	4.0000	40000	60.000	.2650-01	.2200-01	.2960-01	.1262-02	.1047-02	.1407-02	.8300	10.79	558.6
96	4.0000	42500	61.000	.1390-01	.1150-01	.1550-01	.6610-03	.5488-03	.7363-03	.4370	5.688	555.5

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 219

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

(RV8002)

RUN NUMBER	TRAIL	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(1AN) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMOY DEG. R /SEC	TH DEG. R
96	4.0000	.45000	62.000	.9600-02	.8000-02	.1070-01	.4565-03	.3791-03	.5084-03	.3020	3.895	553.9
96	4.0000	.47500	63.000	.7000-02	.5900-02	.7800-02	.3354-03	.2786-03	.3734-03	.222J	2.820	552.6
96	4.0000	.50000	64.000	.5400-02	.4500-02	.6000-02	.2567-03	.2133-03	.2857-03	.1710	2.104	551.2
96	4.0000	.52500	65.000	.4500-02	.3700-02	.5000-02	.2141-03	.1780-03	.2384-03	.1420	1.756	551.1
96	4.0000	.55000	66.000	.4000-02	.3300-02	.4400-02	.1881-03	.1564-03	.2093-03	.1250	1.417	550.3
96	4.0000	.60000	67.000	.2100-02	.1700-02	.2300-02	.9840-04	.8182-04	.1095-03	.6600-01	.732	549.1
96	4.0000	.65000	68.000	.1200-02	.1000-02	.1400-02	.5875-04	.4886-04	.6536-04	.3900-01	.4590	548.3
96	4.0000	.70000	69.000	.1900-02	.1600-02	.2200-02	.9219-04	.7668-04	.1026-03	.6200-01	.6840	548.2
96	4.0000	.75000	70.000	.2500-02	.2300-02	.2700-02	.1171-03	.9737-04	.1303-03	.7800-01	.8670	549.6
96	4.0000	.80000	75.000	.1200-02	.1000-02	.1300-02	.5667-04	.4710-04	.6308-04	.3800-01	.4520	551.2
96	4.0000	.85000	76.000	.1200-02	.1000-02	.1300-02	.5552-04	.4613-04	.6182-04	.3700-01	.4350	552.5
96	4.0000	.87500	77.000	.1100-02	.9000-03	.1200-02	.5325-04	.4424-04	.5928-04	.3500-01	.4610	552.7
96	4.0000	.90000	78.000	.1300-02	.1100-02	.1400-02	.6128-04	.5090-04	.6823-04	.4100-01	.5230	553.3
96	4.0000	.92500	79.000	.1800-02	.1500-02	.2000-02	.8505-04	.7063-04	.9472-04	.5600-01	.6930	554.1
96	4.0000	.95000	80.000	.3800-02	.3200-02	.4300-02	.1826-03	.1517-03	.2034-03	.1210	1.410	554.0

ORBITER FUSELAGE PORT SIDE

(RV8002)

OH-74 (AEDC V41B-88A) 862C12F10H16M127E52V8R19

PARAMETRIC DATA

PARAMETRIC DATA									
BETA	1.000	MACH	8.000	ELEVON	.0000	RUDDER	.0000		
TEST CONDITIONS									
RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA
70	8.000	19.85	662.5	1346.	-174.3	1.000	97.50	.8800-01	3.958
RUN NUMBER	RV/L X10 6	HTREF BTU/ R	STN NO R=	HTREF BTU/ R	HTREF BTU/ R	HTREF BTU/ R	HTREF BTU/ R	HTREF BTU/ R	HTREF BTU/ R
70	3.747	.4916-01	.2084-01	.1030-01	.1030-01	.1030-01	.1030-01	.1030-01	.1030-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HTREF R=0.9	H/HTREF R=1.0	H/HTREF R=TAW	H/HTREF BTU/ R	H/HTREF BTU/ R	H/HTREF BTU/ R	DTMDT DEG. R	TH DEG. R
70	1.0000	.27500	1.0000	.1360-01	.1130-01	.1510-01	.6663-03	.5545-03	.7411-03	.4450	544.2
70	1.0000	.30000	2.0000	.1210-01	.1000-01	.1340-01	.5929-03	.4334-03	.6594-03	.3960	543.9
70	1.0000	.32500	3.0000	.9600-02	.8000-02	.1060-01	.4696-03	.3909-03	.5222-03	.3140	543.4
70	1.0000	.35000	4.0000	.1000-01	.8300-02	.1110-01	.4919-03	.4095-03	.5470-03	.3290	543.2
70	1.0000	.37500	5.0000	.1030-01	.8600-02	.1150-01	.5081-03	.4228-03	.5651-03	.3390	544.0
70	1.0000	.40000	6.0000	.1200-01	.1000-01	.1340-01	.5918-03	.4825-03	.6581-03	.3950	543.7
70	1.0000	.42500	7.0000	.1200-01	.1000-01	.1340-01	.5918-03	.4825-03	.6581-03	.3950	544.3
70	1.0000	.45000	8.0000	.1550-01	.1290-01	.1720-01	.7605-03	.6338-03	.8459-03	.5070	544.6
70	1.0000	.47500	9.0000	.1970-01	.1640-01	.2130-01	.9557-03	.8038-03	.1076-02	.6420	547.2
70	1.0000	.50000	10.000	.1730-01	.1440-01	.1930-01	.8525-03	.7091-03	.9484-03	.5670	545.8
70	1.0000	.52500	11.000	.1750-01	.1450-01	.1950-01	.8595-03	.7149-03	.9563-03	.5720	546.2
70	1.0000	.55000	12.000	.1850-01	.1540-01	.2060-01	.9090-03	.7561-03	.1011-02	.6050	545.8
70	1.0000	.60000	13.000	.2200-01	.1830-01	.2450-01	.1082-02	.8994-03	.1244-02	.7180	548.2
70	1.0000	.65000	14.000	.2950-01	.2370-01	.3170-01	.1402-02	.1155-02	.1560-02	.9290	548.5
70	1.0000	.70000	15.000	.2740-01	.2280-01	.3050-01	.1346-02	.1119-02	.1499-02	.8910	549.5
70	1.0000	.75000	16.000	.3790-01	.3150-01	.4220-01	.1863-02	.1548-02	.2075-02	1.230	551.4
70	1.0000	.80000	17.000	.4900-01	.4070-01	.5460-01	.2411-02	.2000-02	.2686-02	1.581	555.4
70	1.0000	.85000	18.000	.1430-01	.1190-01	.1590-01	.7043-03	.5861-03	.7812-03	.4700	543.9
70	1.0000	.90000	19.000	.1160-01	.9600-02	.1280-01	.5680-03	.4727-03	.6316-03	.3790	543.4
70	1.0000	.95000	20.000	.1370-01	.1140-01	.1520-01	.6735-03	.5605-03	.7490-03	.4500	543.9
70	1.0000	.42600	21.000	.2130-01	.1770-01	.2370-01	.1048-02	.8713-03	.1166-02	.6970	546.4
70	1.0000	.47800	22.000	.2190-01	.1820-01	.2430-01	.1075-02	.8938-03	.1196-02	.7140	546.8

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITTER FUSELAGE PORT SIDE

PAGE 221

OH-74 (AEDC V41B-B8A) 862C12F10H16W127E52V8R19

(RVB002)

RUN NUMBER	TRA/E	X/L	T/C NO	H/HREF		H/HREF		H/HREF		H(9T0)		H(10)		H(11M)		QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TM DEG. R
				R=0.9	R=1.0	R=TAH	R=TAH	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC	BTU/ R FT2SEC			
70	2.0000	.53000	23.000	.2820-01	.2340-01	.3140-01	.3140-01	.1387-02	.152-02	.1543-02	.1543-02	.1543-02	.1543-02	.1543-02	.1543-02	10.20	549.2	
70	2.0000	.56700	24.000	.3260-01	.2710-01	.3630-01	.3630-01	.1604-02	.1333-02	.1796-02	.1796-02	.1796-02	.1796-02	.1796-02	.1796-02	11.50	549.8	
70	2.0000	.62000	25.000	.3610-01	.3000-01	.4010-01	.4010-01	.1773-02	.1473-02	.1963-02	.1963-02	.1963-02	.1963-02	.1963-02	.1963-02	12.70	550.0	
70	2.0000	.67000	26.000	.5960-01	.4950-01	.6650-01	.6650-01	.2932-02	.2432-02	.3267-02	.3267-02	.3267-02	.3267-02	.3267-02	.3267-02	20.76	556.0	
70	2.0000	.70500	27.000	.6260-01	.5190-01	.6980-01	.6980-01	.3079-02	.2553-02	.3433-02	.3433-02	.3433-02	.3433-02	.3433-02	.3433-02	21.48	558.5	
70	2.0000	.75000	28.000	.3690-01	.3240-01	.4340-01	.4340-01	.1915-02	.1590-02	.2132-02	.2132-02	.2132-02	.2132-02	.2132-02	.2132-02	13.83	551.0	
70	2.0000	.80000	29.000	.2160-01	.1800-01	.2400-01	.2400-01	.1061-02	.8826-03	.181-02	.181-02	.181-02	.181-02	.181-02	.181-02	7.767	546.9	
70	2.0000	.82400	30.000	.9600-02	.8000-02	.1060-01	.1060-01	.4703-03	.3910-03	.5233-03	.5233-03	.5233-03	.5233-03	.5233-03	.5233-03	4.341	547.4	
70	3.0000	.20000	31.000	.3090-01	.2560-01	.3440-01	.3440-01	.1517-02	.1260-02	.1690-02	.1690-02	.1690-02	.1690-02	.1690-02	.1690-02	10.55	552.9	
70	3.0000	.22500	32.000	.2520-01	.2100-01	.2810-01	.2810-01	.1240-02	.1031-02	.1381-02	.1381-02	.1381-02	.1381-02	.1381-02	.1381-02	9.157	549.9	
70	3.0000	.25000	33.000	.1850-01	.1540-01	.2050-01	.2050-01	.9107-03	.7573-03	.1013-02	.1013-02	.1013-02	.1013-02	.1013-02	.1013-02	6.769	546.6	
70	3.0000	.27500	34.000	.1420-01	.1180-01	.1590-01	.1590-01	.6976-03	.5805-03	.7759-03	.7759-03	.7759-03	.7759-03	.7759-03	.7759-03	5.576	544.1	
70	3.0000	.30000	35.000	.1220-01	.1010-01	.1350-01	.1350-01	.5982-03	.4960-03	.6652-03	.6652-03	.6652-03	.6652-03	.6652-03	.6652-03	4.953	542.8	
70	3.0000	.32500	36.000	.1300-01	.1080-01	.1440-01	.1440-01	.6377-03	.5309-03	.7090-03	.7090-03	.7090-03	.7090-03	.7090-03	.7090-03	5.001	542.9	
70	3.0000	.35000	37.000	.1390-01	.1160-01	.1550-01	.1550-01	.6855-03	.5705-03	.7622-03	.7622-03	.7622-03	.7622-03	.7622-03	.7622-03	5.314	543.4	
70	3.0000	.37500	38.000	.1430-01	.1240-01	.1660-01	.1660-01	.7339-03	.6108-03	.8160-03	.8160-03	.8160-03	.8160-03	.8160-03	.8160-03	5.749	543.4	
70	3.0000	.40000	39.000	.2360-01	.1960-01	.2620-01	.2620-01	.1159-02	.9641-03	.1289-02	.1289-02	.1289-02	.1289-02	.1289-02	.1289-02	9.093	545.3	
70	3.0000	.42500	40.000	.2690-01	.2240-01	.3000-01	.3000-01	.1323-02	.1100-02	.1473-02	.1473-02	.1473-02	.1473-02	.1473-02	.1473-02	10.39	547.5	
70	3.0000	.45000	41.000	.2670-01	.2220-01	.2980-01	.2980-01	.1315-02	.1093-02	.1463-02	.1463-02	.1463-02	.1463-02	.1463-02	.1463-02	9.970	546.7	
70	3.0000	.47500	42.000	.2930-01	.2440-01	.3240-01	.3240-01	.1440-02	.1197-02	.1603-02	.1603-02	.1603-02	.1603-02	.1603-02	.1603-02	10.62	549.1	
70	3.0000	.50000	43.000	.3560-01	.2960-01	.3700-01	.3700-01	.1751-02	.1459-02	.1950-02	.1950-02	.1950-02	.1950-02	.1950-02	.1950-02	12.85	550.5	
70	3.0000	.52500	44.000	.4280-01	.3560-01	.4770-01	.4770-01	.2105-02	.1749-02	.2344-02	.2344-02	.2344-02	.2344-02	.2344-02	.2344-02	16.26	550.6	
70	3.0000	.55000	45.000	.5440-01	.4510-01	.6060-01	.6060-01	.2673-02	.2219-02	.2977-02	.2977-02	.2977-02	.2977-02	.2977-02	.2977-02	19.48	553.7	
70	3.0000	.57500	46.000	.8450-01	.7000-01	.9430-01	.9430-01	.4155-02	.3441-02	.4635-02	.4635-02	.4635-02	.4635-02	.4635-02	.4635-02	29.04	562.3	
70	3.0000	.60000	47.000	.4430-01	.3600-01	.4830-01	.4830-01	.2130-02	.1769-02	.2373-02	.2373-02	.2373-02	.2373-02	.2373-02	.2373-02	14.83	552.5	
70	3.0000	.70000	48.000	.2110-01	.1750-01	.2340-01	.2340-01	.1036-02	.8616-03	.1153-02	.1153-02	.1153-02	.1153-02	.1153-02	.1153-02	7.589	546.4	
70	3.0000	.75000	49.000	.1390-01	.1160-01	.1550-01	.1550-01	.6839-03	.5690-03	.7608-03	.7608-03	.7608-03	.7608-03	.7608-03	.7608-03	4.951	545.0	
70	3.0000	.80000	50.000	.1120-01	.9400-02	.1250-01	.1250-01	.5529-03	.4600-03	.6151-03	.6151-03	.6151-03	.6151-03	.6151-03	.6151-03	3.941	545.4	
70	3.0000	.85000	51.000	.2300-01	.1030-01	.1370-01	.1370-01	.6067-03	.5044-03	.6753-03	.6753-03	.6753-03	.6753-03	.6753-03	.6753-03	4.970	549.2	
70	3.0000	.87500	52.000	.3040-01	.2520-01	.3380-01	.3380-01	.1493-02	.1239-02	.1663-02	.1663-02	.1663-02	.1663-02	.1663-02	.1663-02	12.08	554.3	
70	3.0000	.90000	53.000	.1750-01	.1450-01	.1950-01	.1950-01	.9609-03	.7148-03	.9589-03	.9589-03	.9589-03	.9589-03	.9589-03	.9589-03	7.859	552.8	
70	3.0000	.92500	54.000	.1850-01	.1540-01	.2060-01	.2060-01	.9089-03	.7547-03	.1012-02	.1012-02	.1012-02	.1012-02	.1012-02	.1012-02	7.813	552.6	
70	3.0000	.95000	55.000	.2100-01	.1740-01	.2340-01	.2340-01	.1031-02	.8585-03	.1148-02	.1148-02	.1148-02	.1148-02	.1148-02	.1148-02	6.667	551.3	
70	4.0000	.20000	71.000	.3820-01	.3160-01	.4260-01	.4260-01	.1876-02	.1595-02	.2092-02	.2092-02	.2092-02	.2092-02	.2092-02	.2092-02	13.87	549.3	
70	4.0000	.22500	72.000	.2990-01	.2470-01	.3320-01	.3320-01	.1465-02	.1216-02	.1632-02	.1632-02	.1632-02	.1632-02	.1632-02	.1632-02	11.24	553.6	
70	4.0000	.25000	73.000	.2150-01	.1790-01	.2390-01	.2390-01	.1056-02	.8779-03	.1176-02	.1176-02	.1176-02	.1176-02	.1176-02	.1176-02	5.179	549.3	
70	4.0000	.27500	74.000	.1700-01	.1410-01	.1890-01	.1890-01	.8362-03	.6951-03	.9306-03	.9306-03	.9306-03	.9306-03	.9306-03	.9306-03	6.600	548.1	
70	4.0000	.30000	75.000	.1550-01	.1300-01	.1730-01	.1730-01	.7659-03	.6379-03	.8571-03	.8571-03	.8571-03	.8571-03	.8571-03	.8571-03	6.670	546.2	
70	4.0000	.32500	76.000	.1650-01	.1370-01	.1830-01	.1830-01	.8107-03	.6744-03	.9019-03	.9019-03	.9019-03	.9019-03	.9019-03	.9019-03	7.056	545.8	
70	4.0000	.35000	77.000	.2890-01	.2400-01	.3220-01	.3220-01	.1422-02	.1181-02	.1582-02	.1582-02	.1582-02	.1582-02	.1582-02	.1582-02	12.30	549.3	
70	4.0000	.37500	78.000	.3780-01	.3140-01	.4210-01	.4210-01	.1859-02	.1544-02	.2069-02	.2069-02	.2069-02	.2069-02	.2069-02	.2069-02	16.06	550.2	
70	4.0000	.40000	79.000	.5020-01	.4160-01	.5590-01	.5590-01	.2466-02	.2047-02	.2747-02	.2747-02	.2747-02	.2747-02	.2747-02	.2747-02	21.15	553.8	
70	4.0000	.42500	81.000	.6750-01	.5590-01	.7520-01	.7520-01	.3317-02	.2750-02	.3698-02	.3698-02	.3698-02	.3698-02	.3698-02	.3698-02	28.18	558.4	

REPRODUCTION OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75		OH-7A (AEDC V418-B7A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE										PAGE 222
RUN NUMBER		OH-7A (AEDC V418-B7A) B62C12F10M16W127E52/BR19										(RV8002)
	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H/970 BTU/ R FT2SEC	H/100 BTU/ R FT2SEC	H/110 BTU/ R FT2SEC	ODOT BTU/ FT2SEC	CTHDT DEG. R /SEC	TM DEG. R
70	4.0000	.45000	62.000	.8920-01	.7380-01	.9950-01	.4384-02	.3629-02	.4893-02	2.837	36.37	564.4
70	4.0000	.47500	53.000	.7980-01	.6590-01	.8910-01	.3921-02	.3241-02	.4381-02	2.516	31.62	559.8
70	4.0000	.50000	64.000	.5230-01	.4340-01	.5830-01	.2569-02	.2131-02	.2864-02	1.682	20.68	550.0
70	4.0000	.52500	65.000	.3400-01	.2830-01	.3790-01	.1674-02	.1390-02	.1864-02	1.104	13.62	551.4
70	4.0000	.55000	66.000	.2460-01	.2040-01	.2740-01	.1209-02	.1005-02	.1346-02	.8020	9.384	548.1
70	4.0000	.60000	67.000	.1380-01	.1150-01	.5300-01	.6781-03	.5542-03	.7543-03	.4520	5.083	544.9
70	4.0000	.65000	68.000	.1040-01	.8600-02	.1150-01	.5091-03	.4236-03	.5663-03	.3400	3.980	544.6
70	4.0000	.70000	69.000	.9400-02	.7900-02	.1050-01	.4643-03	.3863-03	.5184-03	.3100	3.447	544.7
70	4.0000	.75000	70.000	.7500-02	.6300-02	.8400-02	.3709-03	.3086-03	.4125-03	.2470	2.756	544.3
70	4.0000	.80000	75.000	.3400-02	.2800-02	.3200-02	.1859-03	.1380-03	.1845-03	.1110	1.331	544.0
70	4.0000	.85000	76.000	.4100-02	.3400-02	.4500-02	.2008-03	.1571-03	.2233-03	.1340	.596	544.5
70	4.0000	.87500	77.000	.5200-02	.4400-02	.5800-02	.2573-03	.2140-03	.2863-03	.1710	2.239	545.6
70	4.0000	.90000	78.000	.1110-01	.9200-02	.1240-01	.5468-03	.4544-03	.6086-03	.3520	4.677	549.2
70	4.0000	.92500	79.000	.1410-01	.1170-01	.1570-01	.6951-03	.5774-03	.7740-03	.4590	5.663	550.9
70	4.0000	.95000	80.000	.7300-02	.6100-02	.9200-02	.3600-03	.2992-03	.4007-03	.2380	2.789	549.0

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 224

OH-74 (AEDC V41B-BBA) R6C12F10M16M127E52VBR19

(RV8002)

RUN NUMBER	TRAPE	X/L	T/C NO	W/REF R=0.9	W/REF R=1.0	W/REF R=TAN	W19T0 BTU/R	W1T01 F12SEC	K1TAM BTU/R	QDOT BTU/ F12SEC	D1 DEG. R /SEC	TH DEG. R
71	2.0000	53000	23.000	.3930-01	.3260-01	.4380-01	.1934-02	.1605-02	.2150-02	1.270	14.08	553.1
71	2.0000	56700	24.000	.7300-01	.6050-01	.8140-01	.3591-02	.2975-02	.4006-02	2.332	25.13	560.3
71	2.0000	62000	25.000	.7340-01	.6080-01	.8190-01	.3610-02	.2991-02	.4026-02	2.345	25.29	559.9
71	2.0000	67000	26.000	.2680-01	.2230-01	.2980-01	.1318-02	.1095-02	.1468-02	.8680	9.406	550.8
71	2.0000	70500	27.000	.1820-01	.1510-01	.2020-01	.8948-03	.7436-03	.9961-03	.5910	6.348	548.8
71	2.0000	75000	28.000	.1300-01	.1080-01	.1440-01	.6373-03	.5299-03	.7092-03	.4230	4.631	546.7
71	2.0000	80000	29.000	.1390-01	.1150-01	.1540-01	.6814-03	.5663-03	.7584-03	.4510	4.963	547.8
71	2.0000	82400	30.000	.5100-02	.4200-02	.5600-02	.2491-03	.2070-03	.2773-03	.1650	2.285	549.1
71	3.0000	82000	31.000	.3250-01	.2700-01	.3620-01	.1498-02	.1326-02	.1780-02	1.048	11.06	553.8
71	3.0000	82500	32.000	.2770-01	.2300-01	.3080-01	.1351-02	.1131-02	.1516-02	.8970	10.01	550.5
71	3.0000	85000	33.000	.2030-01	.1690-01	.2260-01	.1601-02	.8322-03	.1114-02	.6630	7.417	546.9
71	3.0000	87500	34.000	.1500-01	.1330-01	.1780-01	.7877-03	.6553-03	.1762-03	.5240	6.271	544.5
71	3.0000	90000	35.000	.1420-01	.1180-01	.1500-01	.6969-03	.5799-03	.7751-03	.4640	5.748	543.5
71	3.0000	92500	36.000	.1490-01	.1240-01	.1660-01	.7349-03	.6114-03	.8174-03	.4690	5.736	544.0
71	3.0000	95000	37.000	.1610-01	.1340-01	.1790-01	.7913-03	.6583-03	.8803-03	.5260	6.108	544.3
71	3.0000	97500	38.000	.2620-01	.2140-01	.2920-01	.1290-02	.1073-02	.1436-02	.8550	10.01	546.8
71	3.0000	40000	39.000	.3030-01	.2520-01	.3370-01	.1492-02	.1240-02	.1660-02	.9870	11.61	547.8
71	3.0000	42500	40.000	.3360-01	.2790-01	.3740-01	.1653-02	.1373-02	.1840-02	1.089	12.86	550.7
71	3.0000	45000	41.000	.3980-01	.3310-01	.4440-01	.1960-02	.1628-02	.2183-02	1.291	14.70	551.0
71	3.0000	47500	42.000	.5290-01	.4350-01	.5900-01	.2605-02	.2161-02	.2502-02	1.707	18.91	554.3
71	3.0000	50000	43.000	.7990-01	.6530-01	.8600-01	.3880-02	.3213-02	.4329-02	2.511	27.72	562.3
71	3.0000	52500	44.000	.7710-01	.6380-01	.8600-01	.3793-02	.3141-02	.4232-02	2.455	28.52	562.3
71	3.0000	55000	45.000	.5710-01	.4770-01	.6360-01	.2808-02	.2328-02	.3130-02	1.833	20.29	556.7
71	3.0000	60000	46.000	.2120-01	.1760-01	.2360-01	.1042-02	.8663-03	.1160-02	.6890	7.473	548.4
71	3.0000	65000	47.000	.1200-01	.1020-01	.1340-01	.5908-03	.4913-03	.6574-03	.3920	4.153	546.2
71	3.0000	70000	48.000	.7700-02	.6400-02	.8430-02	.3809-03	.3168-03	.4238-03	.2530	2.791	545.0
71	3.0000	75000	49.000	.6800-02	.5700-02	.7600-02	.3356-03	.2792-03	.3733-03	.2230	2.424	544.8
71	3.0000	80000	50.000	.0000	.0000	.0000	.2335-07	.1942-07	.2598-07	.0000	.0000	545.9
71	3.0000	85000	51.000	.7700-02	.6400-02	.8600-02	.3790-03	.3148-03	.4220-03	.2500	3.084	550.2
71	3.0000	87500	52.000	.1200-01	.1000-01	.1340-01	.5912-03	.4910-03	.6585-03	.3890	4.798	551.4
71	3.0000	90000	53.000	.1480-01	.1230-01	.1630-01	.7293-03	.6054-03	.8125-03	.4790	6.636	553.1
71	3.0000	92500	54.000	.2100-01	.1740-01	.2330-01	.1031-02	.8556-03	.1149-02	.6760	8.821	553.5
71	3.0000	95000	55.000	.2260-01	.1880-01	.2520-01	.1113-02	.9242-03	.1240-02	.7310	7.374	552.6
71	4.0000	20000	71.000	.3980-01	.3300-01	.4440-01	.1957-02	.1621-02	.2183-02	1.271	14.41	559.9
71	4.0000	22500	72.000	.3940-01	.3250-01	.4360-01	.1494-02	.1240-02	.1665-02	.9800	11.43	554.0
71	4.0000	25000	73.000	.2320-01	.1910-01	.2560-01	.1130-02	.9385-03	.1258-02	.7450	9.709	550.1
71	4.0000	27500	74.000	.1980-01	.1630-01	.2180-01	.9846-03	.8015-03	.1074-02	.6370	7.867	545.0
71	4.0000	30000	56.000	.1590-01	.1320-01	.1770-01	.7036-03	.6515-03	.8770-03	.5190	6.798	546.7
71	4.0000	32500	57.000	.2860-01	.2380-01	.3190-01	.1474-02	.1170-02	.1567-02	.9290	12.14	545.6
71	4.0000	35000	58.000	.4430-01	.3680-01	.4940-01	.2181-02	.1810-02	.2429-02	1.630	18.65	553.7
71	4.0000	37500	59.000	.6810-01	.5640-01	.7000-01	.3351-02	.2777-02	.3738-02	2.178	28.31	556.8
71	4.0000	40000	60.000	.6750-01	.5590-01	.7430-01	.3319-02	.2748-02	.3703-02	2.147	27.87	552.6
71	4.0000	42500	61.000	.4600-01	.3620-01	.5130-01	.2264-02	.1878-02	.2523-02	1.482	19.32	554.7



2-6

(RV8002)

HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-B8A) 862C12F10H16H127E52V8R19

DATE 07 OCT 75	OH-74 (AEDC V41B-B8A)	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9T0) BTU/ R FT2SEC	H(1T0) BTU/ R FT2SEC	H(1AH) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
71	4.0000	.2660-01	.2210-01	.2960-01	.1307-02	.1086-02	.1456-02	.8620	11.13	550.1
71	4.0000	.1860-01	.1540-01	.2070-01	.9129-03	.7585-03	.1016-02	.6330	7.654	549.3
71	4.0000	.1220-01	.1010-01	.1350-01	.5979-03	.4971-03	.6654-01	.3.71	1.896	546.9
71	4.0000	.9600-02	.8000-02	.1070-01	.4710-03	.3916-03	.5241-01	.3143	3.859	546.7
71	4.0000	.7900-02	.6600-02	.8800-02	.3888-03	.3233-03	.4326-03	.2500	3.022	546.0
71	4.0000	.6400-02	.5300-02	.7100-02	.3161-03	.2629-03	.3516-03	.2100	2.364	544.7
71	4.0000	.6000	.0000	.0000	.2479-07	.2062-07	.2757-07	.0000	.0000	544.7
71	4.0000	.0000	.0000	.0000	.1508-07	.1253-07	.1676-07	.0000	.0000	545.0
71	4.0000	.0000	.0000	.0000	.9488-10	.7894-10	.1055-09	.0000	.0000	544.4
71	4.0000	.0000	.0000	.0000	.1392-07	.1157-07	.1548-07	.0000	.0000	546.1
71	4.0000	.0000	.0000	.0000	.1073-08	.8924-09	.1194-08	.0000	.0000	545.9
71	4.0000	.0000	.0000	.0000	.1821-07	.1514-07	.2027-07	.0000	.0000	547.7
71	4.0000	.5500-02	.4600-02	.6200-02	.2719-03	.2260-03	.3026-03	.1800	2.324	548.3
71	4.0000	.9300-02	.7800-02	.1040-01	.4598-03	.3821-03	.5119-03	.3040	3.748	549.3
71	4.0000	.1140-01	.9500-02	.1270-01	.5621-03	.4669-03	.6259-03	.3710	4.332	550.3

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

(RV8002)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 1.000 YACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
72	8.000	29.83	863.0	134.2	-90.02	1.000	97.20	.8600-01	3.960	39.6	.7627-04	.7829-07

RUN NUMBER	RN/L X10.6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175 .2079-01
72	3.766	.4914-01	

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H1GTO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
72	1.0000	.27500	1.0000	.1520-01	.1260-01	.1690-01	.7467-03	.6206-03	.8310-03	.4930	5.105	547.0
72	1.0000	.30000	2.0000	.1340-01	.1110-01	.1490-01	.6575-03	.5465-03	.7317-03	.4350	4.605	546.7
72	1.0000	.32500	3.0000	.1150-01	.0900-02	.1260-01	.5673-03	.4716-03	.6313-03	.3750	3.850	546.1
72	1.0000	.35000	4.0000	.1130-01	.0900-02	.1260-01	.5577-03	.4636-03	.6206-03	.3690	3.817	546.4
72	1.0000	.37500	5.0000	.1260-01	.1050-01	.1410-01	.6209-03	.5161-03	.6911-03	.4100	4.306	546.9
72	1.0000	.40000	6.0000	.1950-01	.1620-01	.2170-01	.9595-03	.7971-03	.1063-02	.6320	5.476	548.8
72	1.0000	.42500	7.0000	.1780-01	.1480-01	.1980-01	.8759-03	.7276-03	.9753-03	.5770	5.961	549.3
72	1.0000	.45000	8.0000	.2190-01	.1820-01	.2440-01	.1077-02	.8945-03	.1199-02	.7090	7.320	549.8
72	1.0000	.47500	9.0000	.1720-01	.1430-01	.1910-01	.8433-03	.7005-03	.9389-03	.5550	5.634	549.3
72	1.0000	.50000	10.000	.2010-01	.1670-01	.2240-01	.9891-03	.8215-03	.1101-02	.6510	6.570	550.0
72	1.0000	.52500	11.000	.2710-01	.2250-01	.3020-01	.1333-02	.1107-02	.1485-02	.8750	9.827	551.4
72	1.0000	.55000	12.000	.2830-01	.2350-01	.3150-01	.1309-02	.1153-02	.1547-02	.9120	9.119	551.3
72	1.0000	.60000	13.000	.4680-01	.3880-01	.5220-01	.2302-02	.1907-02	.2567-02	1.494	15.02	558.8
72	1.0000	.65000	14.000	.5150-01	.4270-01	.5743-01	.2530-02	.2097-02	.2822-02	1.643	16.51	558.6
72	1.0000	.70000	15.000	.4820-01	.4000-01	.5380-01	.2369-02	.1964-02	.2642-02	1.540	14.94	558.0
72	1.0000	.75000	16.000	.2850-01	.2370-01	.3180-01	.1402-02	.1163-02	.1562-02	.9180	9.249	553.3
72	1.0000	.80000	17.000	.1480-01	.1230-01	.1650-01	.7268-03	.6033-03	.8097-03	.4760	4.594	552.5
72	1.0000	.85000	18.000	.1640-01	.1360-01	.1820-01	.8040-03	.6681-03	.8970-03	.5300	6.208	548.0
72	2.0000	.28500	19.000	.1400-01	.1170-01	.1560-01	.6904-03	.5738-03	.7685-03	.4560	5.362	547.7
72	2.0000	.33700	20.000	.2620-01	.2180-01	.2920-01	.1290-02	.1071-02	.1430-02	.8480	9.961	550.5
72	2.0000	.39000	21.000	.2990-01	.2480-01	.3340-01	.1471-02	.1221-02	.1633-02	.9630	11.24	553.5
72	2.0000	.42600	22.000	.3830-01	.3170-01	.4260-01	.1880-02	.1560-02	.2096-02	1.229	13.62	554.2

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 227

OH-74 (AEDC V418-B8A) 862C12F10M16H127E52V8R19

(RV8002)

RUN N. 18R	TIME	X/L	T/C NO	H/REF		H/REF R=0.9	H/REF		H/REF R=1.0	H/REF		H19T01 BTU/ R F12SEC	H1T01 BTU/ R F12SEC	H1TAM BTU/ R F12SEC	QDOT BTU/ F12SEC	D1WOT DEG. R /SEC	TH DEG. R
				R=0.9	R=1.0	R=0.9	R=1.0	R=TAH	R=TAH	R=0.9	R=1.0						
72	2.0000	.53000	23.000	.5070-01	.4203-01	.5660-01	.2493-02	.5660-01	.5660-01	.4203-01	.2493-02	.2069-02	.2069-02	.2783-02	1.615	17.85	559.9
72	2.0000	.56700	24.000	.5080-01	.4210-01	.5670-01	.2496-02	.5670-01	.5670-01	.4210-01	.2496-02	.2069-02	.2069-02	.2783-02	1.622	17.51	557.8
72	2.0000	.62000	25.000	.5120-01	.4250-01	.5680-01	.2530-02	.5680-01	.5680-01	.4250-01	.2530-02	.2069-02	.2069-02	.2783-02	1.606	10.88	552.9
72	2.0000	.67000	26.000	.5180-01	.4270-01	.5690-01	.2580-02	.5690-01	.5690-01	.4270-01	.2580-02	.2069-02	.2069-02	.2783-02	1.600	6.627	550.7
72	2.0000	.70500	27.000	.5240-01	.4300-01	.5700-01	.2630-02	.5700-01	.5700-01	.4300-01	.2630-02	.2069-02	.2069-02	.2783-02	1.600	4.665	548.5
72	2.0000	.75000	28.000	.5300-01	.4330-01	.5710-01	.2680-02	.5710-01	.5710-01	.4330-01	.2680-02	.2069-02	.2069-02	.2783-02	1.600	3.671	549.2
72	2.0000	.80000	29.000	.5360-01	.4360-01	.5720-01	.2730-02	.5720-01	.5720-01	.4360-01	.2730-02	.2069-02	.2069-02	.2783-02	1.600	3.004	548.9
72	2.0000	.82400	30.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	.8930	550.0
72	3.0000	.20000	31.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	11.36	559.2
72	3.0000	.22500	32.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	10.26	555.8
72	3.0000	.25000	33.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	7.986	551.8
72	3.0000	.27500	34.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	6.720	548.8
72	3.0000	.30000	35.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	6.249	547.6
72	3.0000	.32500	36.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	6.272	547.3
72	3.0000	.35000	37.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	9.519	549.9
72	3.0000	.37500	38.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	12.19	551.8
72	3.0000	.40000	39.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	13.99	553.2
72	3.0000	.42500	40.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	11.74	553.3
72	3.0000	.45000	41.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	19.61	557.8
72	3.0000	.47500	42.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	15.96	557.6
72	3.0000	.50000	43.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	12.30	553.9
72	3.0000	.52500	44.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	9.738	550.6
72	3.0000	.55000	45.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	6.841	550.1
72	3.0000	.60000	46.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	3.908	548.0
72	3.0000	.65000	47.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	2.130	547.0
72	3.0000	.70000	48.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	1.960	547.1
72	3.0000	.75000	49.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	1.602	546.8
72	3.0000	.80000	50.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	1.137	547.0
72	3.0000	.85000	51.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	1.048	551.2
72	3.0000	.87500	52.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	1.643	552.2
72	3.0000	.90000	53.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	1.669	553.1
72	3.0000	.92500	54.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	2.708	552.6
72	3.0000	.95000	55.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	2.552	550.3
72	4.0000	.20000	56.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	13.59	566.0
72	4.0000	.22500	57.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	11.28	558.9
72	4.0000	.25000	58.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	8.598	553.6
72	4.0000	.27500	59.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	8.831	552.2
72	4.0000	.30000	60.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	8.883	551.5
72	4.0000	.32500	61.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	16.04	557.4
72	4.0000	.35000	62.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	20.66	561.8
72	4.0000	.37500	63.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	14.20	554.4
72	4.0000	.40000	64.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	10.95	553.0
72	4.0000	.42500	65.000	.5380-01	.4380-01	.5730-01	.2750-02	.5730-01	.5730-01	.4380-01	.2750-02	.2069-02	.2069-02	.2783-02	1.600	8.348	550.6

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE										PAGE 228		
OH-74 (AEDC V41B-88A) 862C12F10M16W127E52V8R19										(RV8002)		
RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9T0) BTU/ R F12SEC	H(1T0) BTU/ R F12SEC	H(1TAN) BTU/ R F12SEC	QDOT BTU/ F12SEC	DTWOT DEG. R /SEC	TH DEG. R
72	4.0000	.45000	62.000	.1240-01	.1030-01	.1380-01	.6088-03	.5058-03	.6778-03	.4010	5.134	548.9
72	4.0000	.47500	63.000	.6900-02	.7400-02	.9900-02	.4370-03	.3631-03	.4865-03	.2880	3.561	548.3
72	4.0000	.50000	64.000	.6400-02	.5300-02	.7100-02	.3154-03	.2821-03	.3510-03	.2080	2.576	546.9
72	4.0000	.52500	65.000	.4900-02	.4100-02	.5500-02	.2429-03	.2020-03	.2704-03	.1810	1.986	546.4
72	4.0000	.55000	66.000	.4000-02	.3400-02	.4500-02	.1900-03	.1846-03	.2203-03	.1310	1.536	545.8
72	4.0000	.60000	67.000	.3100-02	.2600-02	.3700-02	.1509-03	.1255-03	.1678-03	.1000+00	1.125	545.0
72	4.0000	.65000	68.000	.2200-02	.1800-02	.2400-02	.1085-03	.8855-04	.1185-03	.7100-01	.8270	545.2
72	4.0000	.70000	69.000	.1400-02	.1100-02	.1500-02	.6845-04	.5525-04	.7395-04	.4400-01	.4890	546.0
72	4.0000	.75000	70.000	.1600-02	.1400-02	.1800-02	.8025-04	.6673-04	.8930-04	.5300-01	.5910	545.7
72	4.0000	.80000	75.000	.2500-02	.2100-02	.2800-02	.1242-03	.1032-03	.1382-03	.8200-01	.9870	547.0
72	4.0000	.85000	76.000	.4800-02	.4000-02	.5300-02	.2353-03	.1956-03	.2619-03	.1550	1.838	547.5
72	4.0000	.87500	77.000	.3300-02	.2700-02	.3700-02	.1619-03	.1345-03	.1803-03	.1070	1.395	548.7
72	4.0000	.90000	78.000	.3200-02	.2600-02	.3500-02	.1560-03	.1296-03	.1737-03	.1030	1.328	549.0
72	4.0000	.92500	79.000	.4000-02	.3300-02	.4400-02	.1957-03	.1626-03	.2179-03	.1290	1.590	549.4
72	4.0000	.95000	80.000	.2600-02	.2200-02	.2900-02	.1302-03	.1081-03	.1449-03	.8600-01	1.003	549.1

DATE 07 OCT 75

OH-7A (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 229

ORBITER FUSELAGE

OH-7A (AEDC V41B-88A) B62C12F10M16W127E52V8R19

(RVB002)

PARAMETRIC DATA

BETA = 1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
73	8.000	34.94	864.4	1346.	168.8	1.000	97.50	.8900-01	3.967	3871.	.7616-04	.7853-07

RUN NUMBER	RW/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175 .2082-01
73	3.755	.4921-01	

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
73	1.0000	.27500	1.0000	.1570-01	.1310-01	.1750-01	.7734-03	.8435-03	.3601-03	.5160	5.346	544.2
73	1.0000	.30000	2.0000	.1420-01	.1180-01	.1580-01	.7005-03	.5829-03	.7791-03	.4680	4.960	544.0
73	1.0000	.32500	3.0000	.1190-01	.0900-02	.1330-01	.5967-03	.4884-03	.6524-03	.3920	4.027	543.2
73	1.0000	.35000	4.0000	.1380-01	.1150-01	.1530-01	.6789-03	.5630-03	.7549-03	.4540	4.701	543.4
73	1.0000	.37500	5.0000	.1800-01	.1500-01	.2010-01	.6874-03	.7381-03	.9872-03	.5910	6.203	545.6
73	1.0000	.40000	6.0000	.2110-01	.1750-01	.2350-01	.1038-02	.8632-03	.1154-02	.6910	7.085	545.8
73	1.0000	.42500	7.0000	.1630-01	.1360-01	.1810-01	.8025-03	.6675-03	.8928-03	.5340	5.529	545.9
73	1.0000	.45000	8.0000	.1830-01	.1520-01	.2040-01	.9017-03	.7500-03	.1003-02	.6000	6.129	545.7
73	1.0000	.47500	9.0000	.2360-01	.1960-01	.2630-01	.1161-02	.9654-03	.1292-02	.7700	7.823	547.9
73	1.0000	.50000	10.000	.2320-01	.1930-01	.2580-01	.1141-02	.9488-03	.1270-02	.7580	7.657	547.6
73	1.0000	.52500	11.000	.2640-01	.2200-01	.2940-01	.1300-02	.1081-02	.1447-02	.8630	8.720	547.7
73	1.0000	.55000	12.000	.3660-01	.3040-01	.4080-01	.1802-02	.1498-02	.2006-02	1.193	11.95	549.1
73	1.0000	.60000	13.000	.3330-01	.2770-01	.3710-01	.1639-02	.1361-02	.1825-02	1.082	10.91	551.6
73	1.0000	.65000	14.000	.4920-01	.4080-01	.5480-01	.2421-02	.2010-02	.2698-02	1.591	16.03	554.3
73	1.0000	.70000	15.000	.2330-01	.1940-01	.2590-01	.1147-02	.9527-03	.1277-02	.7580	7.383	550.3
73	1.0000	.75000	16.000	.9500-02	.7900-02	.1050-01	.4860-03	.3875-03	.5186-03	.3100	3.130	547.1
73	1.0000	.80000	17.000	.2500-02	.2100-02	.2800-02	.1222-03	.1016-03	.1360-03	.8100-01	.7850	546.8
73	1.0000	.85000	18.000	.1690-01	.1400-01	.1880-01	.8205-03	.6910-03	.9237-03	.5540	6.494	544.4
73	2.0000	.28500	19.000	.1690-01	.1370-01	.1830-01	.8114-03	.6752-03	.9025-03	.5410	6.382	544.1
73	2.0000	.39000	20.000	.2670-01	.2220-01	.2970-01	.1316-02	.1094-02	.1464-02	.8750	10.30	546.2
73	2.0000	.42600	21.000	.2120-01	.1760-01	.2360-01	.1042-02	.8664-03	.1153-02	.6930	8.114	546.3
73	2.0000	.47800	22.000	.3220-01	.2680-01	.3580-01	.1584-02	.1317-02	.1763-02	1.050	11.67	548.7

DATE 07 OCT 75

PAGE 230

(RVB002)

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT S DE

CH-74 (AEDC V41B-B8A) B62C12F10M16M127E52VR19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T0) BTU/ R FT2SEC	H1T0) BTU/ R FT2SEC	H1TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
73	2.0000	.53000	23.000	.4440-01	.3680-01	.4940-01	.2184-02	.1913-02	.2433-02	1.437	15.93	553.4
73	2.0000	.56700	24.000	.2960-01	.2460-01	.3290-01	.1455-02	.1209-02	.1620-02	.9620	10.43	550.0
73	2.1000	.62000	25.000	.2230-01	.1850-01	.2480-01	.1095-02	.9105-03	.1219-02	.7260	7.874	548.5
73	2.0000	.67000	26.000	.9600-02	.8000-02	.1070-01	.4729-03	.3934-03	.5261-03	.3150	3.421	545.4
73	2.0000	.70500	27.000	.7500-02	.6200-02	.8300-02	.3684-03	.3065-03	.4097-03	.2460	2.643	544.5
73	2.0000	.75000	28.000	.4600-02	.3900-02	.3300-02	.2285-03	.1902-03	.2541-03	.1530	1.674	543.8
73	2.0000	.80000	29.000	.3000-02	.2500-02	.3300-02	.1462-03	.1217-03	.1626-03	.9800-01	1.075	544.4
73	2.0000	.82400	30.000	.9000-03	.7000-03	.1000-02	.4257-04	.3540-04	.4736-04	.2800-01	.3940	546.0
73	3.0000	.20000	31.000	.3450-01	.2870-01	.3850-01	.1699-02	.1410-02	.1893-02	1.117	11.79	553.9
73	3.0000	.22500	32.000	.2930-01	.2440-01	.3270-01	.1443-02	.1199-02	.1607-02	.9530	10.63	550.9
73	3.0000	.25000	33.000	.2210-01	.1840-01	.2460-01	.1089-02	.9054-03	.1211-02	.7240	8.094	546.5
73	3.0000	.27500	34.000	.1770-01	.1480-01	.1970-01	.8725-03	.7260-03	.9705-03	.5820	6.966	544.6
73	3.0000	.30000	35.000	.1460-01	.1210-01	.1620-01	.7162-03	.5962-03	.7964-03	.4790	5.930	542.8
73	3.0000	.32500	36.000	.2110-01	.1750-01	.2340-01	.1037-02	.8631-03	.1153-02	.6930	8.124	543.5
73	3.0000	.35000	37.000	.2960-01	.2460-01	.3290-01	.1455-02	.1210-02	.1618-02	.9680	11.23	545.7
73	3.0000	.37500	38.000	.3070-01	.2550-01	.3420-01	.1511-02	.1257-02	.1682-02	1.005	11.76	546.6
73	3.0000	.40000	39.000	.2130-01	.1780-01	.2370-01	.1050-02	.8736-03	.1168-02	.7000	8.255	544.3
73	3.0000	.42500	40.000	.4300-01	.3570-01	.4790-01	.2117-02	.1758-02	.2358-02	1.397	16.49	551.5
73	3.0000	.45000	41.000	.3520-01	.2920-01	.3910-01	.1600-02	.1329-02	.1925-02	1.147	13.07	548.4
73	3.0000	.47500	42.000	.3250-01	.2700-01	.3620-01	.1507-02	.1252-02	.1677-02	1.059	11.77	549.1
73	3.0000	.50000	43.000	.3060-01	.2540-01	.3410-01	.1507-02	.1252-02	.1677-02	.9980	11.09	549.0
73	3.0000	.52500	44.000	.1870-01	.1550-01	.2080-01	.9197-03	.7650-03	.1023-02	.6120	7.167	546.1
73	3.0000	.55000	45.000	.1390-01	.1150-01	.1540-01	.6830-03	.5683-03	.7597-03	.4550	5.069	544.8
73	3.0000	.60000	46.000	.7900-02	.6600-02	.8900-02	.3880-03	.3230-03	.4315-03	.2590	2.819	543.2
73	3.0000	.65000	47.000	.5600-02	.4700-02	.6200-02	.2750-03	.2289-03	.3058-03	.1840	1.952	542.8
73	3.0000	.70000	48.000	.4000-02	.3300-02	.4400-02	.1962-03	.1633-03	.2181-03	.1310	1.449	542.4
73	3.0000	.75000	49.000	.2800-02	.2300-02	.3100-02	.1378-03	.1147-03	.1532-03	.9200-01	1.002	542.7
73	3.0000	.80000	50.000	.2300-02	.1900-02	.2600-02	.1131-03	.9413-04	.1258-03	.7600-01	.8090	543.8
73	3.0000	.85000	51.000	.1500-02	.1200-02	.1600-02	.7217-04	.6000-04	.8070-04	.4800-01	.5920	546.9
73	3.0000	.87500	52.000	.1500-02	.1200-02	.1600-02	.7217-04	.6000-04	.8031-04	.4800-01	.5920	547.4
73	3.0000	.90000	53.000	.1300-02	.1100-02	.1400-02	.6280-04	.5221-04	.6988-04	.4200-01	.5790	547.6
73	3.0000	.92500	54.000	.1700-02	.1400-02	.1900-02	.8433-04	.7012-04	.9385-04	.5600-01	.7320	547.6
73	3.0000	.95000	55.000	.2300-02	.1900-02	.2600-02	.1148-03	.9544-04	.1277-03	.7600-01	.7710	546.9
73	4.0000	.20000	71.000	.3800-01	.3150-01	.4240-01	.1870-02	.1550-02	.2084-02	1.221	13.85	558.3
73	4.0000	.22500	72.000	.2930-01	.2430-01	.3260-01	.1440-02	.1196-02	.1604-02	.9490	11.08	552.7
73	4.0000	.25000	73.000	.2280-01	.1900-01	.2540-01	.124-02	.9344-03	.1251-02	.7450	8.711	548.9
73	4.0000	.27500	74.000	.2690-01	.2240-01	.3000-01	.1325-02	.1101-02	.1474-02	.8770	10.82	549.4
73	4.0000	.30000	56.000	.2540-01	.2110-01	.2830-01	.1252-02	.1041-02	.1373-02	.8310	10.87	547.9
73	4.0000	.32500	57.000	.3680-01	.3050-01	.4090-01	.1809-02	.1502-02	.2014-02	1.193	15.58	551.6
73	4.0000	.35000	58.000	.2850-01	.2370-01	.3170-01	.1403-02	.1166-02	.1562-02	.9300	12.15	548.9
73	4.0000	.37500	59.000	.2800-01	.2330-01	.3110-01	.1376-02	.1144-02	.1532-02	.9130	11.93	548.4
73	4.0000	.40000	60.000	.2780-01	.2310-01	.3090-01	.1366-02	.1136-02	.1520-02	.9060	11.85	548.2
73	4.0000	.42500	61.000	.1470-01	.1220-01	.1640-01	.7243-03	.6026-03	.8057-03	.4830	6.322	545.0

(RV8002)

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-BBA) B62C12F10H16H127E52V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H(9T) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(11) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
73	4.0000	.45000	62.000	.9900-02	.8200-02	.1100-01	.4866-03	.4051-03	.5411-03	.3250	4.214	543.1
73	4.0000	.47500	63.000	.7500-02	.6200-02	.8300-02	.3690-03	.3072-03	.4103-03	.2470	3.142	542.9
73	4.0000	.50000	64.000	.5400-02	.4500-02	.6000-02	.2645-03	.2272-03	.2940-03	.1770	2.193	542.0
73	4.0000	.52500	65.000	.4700-02	.3900-02	.5300-02	.2326-03	.1936-03	.2586-03	.1560	1.928	542.2
73	4.0000	.55000	66.000	.3500-02	.2900-02	.3900-02	.1727-03	.1438-03	.1920-03	.1160	1.357	541.9
73	4.0000	.60000	67.000	.2200-02	.1800-02	.2400-02	.1063-03	.8853-04	.1182-03	.7100-01	.8020	541.7
73	4.0000	.65000	68.000	.1400-02	.1200-02	.1500-02	.6823-04	.5681-04	.7586-04	.4600-01	.5360	541.8
73	4.0000	.70000	69.000	.2100-02	.1700-02	.2300-02	.1010-03	.8409-04	.1123-03	.6800-01	.7520	543.1
73	4.0000	.75000	70.000	.2300-02	.1900-02	.2500-02	.1110-03	.9237-04	.1234-03	.7400-01	.8260	543.2
73	4.0000	.80000	75.000	.1400-02	.1200-02	.1500-02	.6817-04	.5672-04	.7583-04	.4500-01	.5470	544.9
73	4.0000	.85000	76.000	.1300-02	.1100-02	.1400-02	.6312-04	.5252-04	.7021-04	.4200-01	.4990	544.7
73	4.0000	.87500	77.000	.1100-02	.9000-03	.1200-02	.5232-04	.4352-04	.5821-04	.3500-01	.4560	546.0
73	4.0000	.90000	78.000	.1300-02	.1100-02	.1400-02	.6343-04	.5277-04	.7060-04	.4200-01	.5460	546.5
73	4.0000	.92500	79.000	.1900-02	.1600-02	.2100-02	.9423-04	.7836-04	.1048-03	.6300-01	.7740	546.6
73	4.0000	.95000	80.000	.3700-02	.3100-02	.4200-02	.1843-03	.1532-03	.2050-03	.1220	1.433	547.2

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 232

04-74 (AEDC V41B-B8A) B62C12F10H16H127E52V8R19

(RV8003)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
82	7.880	19.84	79.60	1170.	-166.6	2.400	87.20	.9000-02	.3910	3605.	.8656-05	.7020-07

RUN NUMBER	RM/L X10 6 /FT	HREF BTU/ R FT ² SEC /FT	STN NO R= .0175 .6085-01
82	.4446	.1508-01	.6085-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(3TO) BTU/ R FT ² SEC	H(1TO) BTU/ R FT ² SEC	H(TAH) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	OTDOT DEG. R /SEC	TW DEG. R
82	1.0000	.27500	1.0000	.1800-01	.1460-01	.2030-01	.2712-03	.2207-03	.3063-03	.1390	1.438	542.0
82	1.0000	.30000	2.0000	.1390-01	.1130-01	.1570-01	.2090-03	.1701-03	.2360-03	.1070	1.135	541.6
82	1.0000	.32500	3.0000	.1050-01	.0600-02	.1190-01	.1595-03	.1290-03	.1790-03	.8100-01	.8340	541.3
82	1.0000	.35000	4.0000	.1030-01	.0400-02	.1160-01	.1547-03	.1260-03	.1747-03	.7900-01	.8220	541.1
82	1.0000	.37500	5.0000	.9900-02	.8000-02	.1110-01	.1489-03	.1211-03	.1630-03	.7600-01	.8010	541.4
82	1.0000	.40000	6.0000	.1110-01	.9100-02	.1260-01	.1679-03	.1367-03	.1896-03	.8600-01	.8840	541.1
82	1.0000	.42500	7.0000	.1070-01	.8700-02	.1210-01	.1619-03	.1318-03	.1828-03	.8300-01	.8600	541.3
82	1.0000	.45000	8.0000	.1250-01	.1020-01	.1410-01	.1889-03	.1538-03	.2133-03	.9700-01	.9900	540.9
82	1.0000	.47500	9.0000	.1350-01	.1100-01	.1520-01	.2033-03	.1655-03	.2295-03	.1040	1.060	541.1
82	1.0000	.50000	10.0000	.1750-01	.1420-01	.1970-01	.2637-03	.2146-03	.2977-03	.1350	1.369	541.1
82	1.0000	.52500	11.0000	.2110-01	.1710-01	.2380-01	.3177-03	.2586-03	.3588-03	.1620	1.648	541.6
82	1.0000	.55000	12.0000	.2130-01	.1730-01	.2410-01	.3213-03	.2615-03	.3628-03	.1640	1.652	541.4
82	1.0000	.50000	13.0000	.2700-01	.2200-01	.3050-01	.4070-03	.3311-03	.4596-03	.2080	2.110	541.7
82	1.0000	.65000	14.0000	.3920-01	.3180-01	.4420-01	.5904-03	.4803-03	.6569-03	.3010	3.052	542.8
82	1.0000	.70000	15.0000	.4520-01	.3680-01	.5110-01	.6818-03	.5545-03	.7703-03	.3470	3.393	543.7
82	1.0000	.75000	16.0000	.3830-01	.3120-01	.4330-01	.5781-03	.4702-03	.6530-03	.2950	2.987	543.1
82	1.0000	.80000	17.0000	.2420-01	.1970-01	.2740-01	.3657-03	.2974-03	.4130-03	.1860	1.807	543.0
82	2.0000	.28500	18.0000	.1660-01	.1350-01	.1880-01	.2504-03	.2038-03	.2878-03	.1280	1.502	541.9
82	2.0000	.33700	19.0000	.1410-01	.1150-01	.1590-01	.2127-03	.1731-03	.2401-03	.1090	1.285	541.3
82	2.0000	.39000	20.0000	.1520-01	.1240-01	.1720-01	.2293-03	.1867-03	.2589-03	.1170	1.386	541.0
82	2.0000	.42600	21.0000	.1730-01	.1410-01	.1960-01	.2612-03	.2126-03	.2949-03	.1340	1.570	541.1
82	2.0000	.47800	22.0000	.2680-01	.2180-01	.3030-01	.4047-03	.3294-03	.4570-03	.2070	2.309	541.5

DATE 07 OCT 75

OH-74 (AEDC V418-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 233

(RV8003)

OH-74 (AEDC V418-BBA) B62C12F10M16H127E52V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19TO BTU/R FT2SEC	H1TO BTU/R FT2SEC	H1TAW BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TW DEG. R
82	2.0000	.53000	23.000	.3250-01	.2630-01	.3650-01	.4877-03	.3968-03	.5508-03	.2490	2.777	542.3
82	2.0000	.56700	24.000	.4640-01	.3780-01	.5250-01	.7002-03	.5695-03	.7909-03	.3570	3.881	543.1
82	2.0000	.62000	25.000	.5270-01	.4290-01	.5950-01	.7947-03	.6464-03	.8978-03	.4050	4.405	543.2
82	2.0000	.67000	26.000	.6000-01	.4800-01	.6800-01	.9191-03	.7422-03	.9884-03	.4650	2.877	543.2
82	2.0000	.70500	27.000	.6480-01	.5200-01	.7200-01	.9744-03	.8046-03	.9299-03	.5100	2.050	542.2
82	2.0000	.75000	28.000	.6940-01	.5600-01	.7600-01	.9777-03	.8266-03	.9335-03	.5420	1.559	541.9
82	2.0000	.80000	29.000	.7400-01	.6000-01	.8000-01	.9777-03	.8266-03	.9335-03	.5420	1.254	541.8
82	2.0000	.82400	30.000	.7500-02	.6100-02	.8100-02	.9777-03	.8266-03	.9335-03	.5420	.9510	541.7
82	3.0000	.82000	31.000	.7400-01	.6000-01	.8000-01	.9777-03	.8266-03	.9335-03	.5420	2.815	545.6
82	3.0000	.82500	32.000	.7500-01	.6100-01	.8100-01	.9777-03	.8266-03	.9335-03	.5420	2.451	544.3
82	3.0000	.85000	33.000	.7700-01	.6300-01	.8300-01	.9777-03	.8266-03	.9335-03	.5420	1.778	543.4
82	3.0000	.87500	34.000	.7900-01	.6500-01	.8500-01	.9777-03	.8266-03	.9335-03	.5420	.953	542.3
82	3.0000	.90000	35.000	.8100-01	.6700-01	.8700-01	.9777-03	.8266-03	.9335-03	.5420	1.385	541.6
82	3.0000	.92500	36.000	.8300-01	.6900-01	.8900-01	.9777-03	.8266-03	.9335-03	.5420	1.298	541.2
82	3.0000	.95000	37.000	.8500-01	.7100-01	.9100-01	.9777-03	.8266-03	.9335-03	.5420	.381	541.0
82	3.0000	.97500	38.000	.8700-01	.7300-01	.9300-01	.9777-03	.8266-03	.9335-03	.5420	1.420	540.9
82	3.0000	.40000	39.000	.2030-01	.1650-01	.2290-01	.3060-03	.2491-03	.3454-03	.1570	1.851	540.8
82	3.0000	.42500	40.000	.2260-01	.1880-01	.2520-01	.3310-03	.2731-03	.3691-03	.2130	2.523	541.3
82	3.0000	.45000	41.000	.2500-01	.2120-01	.2760-01	.3560-03	.2971-03	.3931-03	.2740	3.133	541.5
82	3.0000	.47500	42.000	.2740-01	.2360-01	.2990-01	.3810-03	.3221-03	.4181-03	.3390	3.449	541.9
82	3.0000	.50000	43.000	.2980-01	.2600-01	.3230-01	.4060-03	.3471-03	.4431-03	.3500	3.897	542.8
82	3.0000	.52500	44.000	.3220-01	.2840-01	.3470-01	.4310-03	.3721-03	.4691-03	.3610	4.788	542.6
82	3.0000	.55000	45.000	.3460-01	.3080-01	.3710-01	.4560-03	.3971-03	.4941-03	.3720	4.952	542.8
82	3.0000	.57500	46.000	.3700-01	.3320-01	.3950-01	.4810-03	.4221-03	.5191-03	.3830	2.724	541.7
82	3.0000	.60000	47.000	.3940-01	.3560-01	.4190-01	.5060-03	.4471-03	.5441-03	.3940	1.732	541.6
82	3.0000	.62500	48.000	.4180-01	.3800-01	.4430-01	.5310-03	.4721-03	.5691-03	.4050	1.187	541.1
82	3.0000	.65000	49.000	.4420-01	.4040-01	.4670-01	.5560-03	.4971-03	.5941-03	.4160	.9900	541.3
82	3.0000	.67500	50.000	.4660-01	.4280-01	.4910-01	.5810-03	.5221-03	.6191-03	.4270	.9900	541.6
82	3.0000	.70000	51.000	.4900-01	.4520-01	.5150-01	.6060-03	.5471-03	.6441-03	.4380	.5090	542.5
82	3.0000	.72500	52.000	.5140-01	.4760-01	.5390-01	.6310-03	.5721-03	.6691-03	.4490	.9710	543.3
82	3.0000	.75000	53.000	.5380-01	.5000-01	.5630-01	.6560-03	.5971-03	.6941-03	.4600	1.159	543.6
82	3.0000	.77500	54.000	.5620-01	.5240-01	.5870-01	.6810-03	.6221-03	.7191-03	.4710	.6990	543.7
82	3.0000	.80000	55.000	.5860-01	.5480-01	.6110-01	.7060-03	.6471-03	.7441-03	.4820	3.504	547.7
82	4.0000	.82500	56.000	.6100-01	.5720-01	.6350-01	.7310-03	.6721-03	.7691-03	.4930	2.823	535.3
82	4.0000	.85000	57.000	.6340-01	.5960-01	.6590-01	.7560-03	.6971-03	.7941-03	.5040	2.166	544.2
82	4.0000	.87500	58.000	.6580-01	.6200-01	.6830-01	.7810-03	.7221-03	.8191-03	.5150	1.773	542.3
82	4.0000	.90000	59.000	.6820-01	.6440-01	.7070-01	.8060-03	.7471-03	.8441-03	.5260	1.890	541.8
82	4.0000	.92500	60.000	.7060-01	.6680-01	.7310-01	.8310-03	.7721-03	.8691-03	.5370	2.440	541.6
82	4.0000	.95000	61.000	.7300-01	.6920-01	.7550-01	.8560-03	.7971-03	.8941-03	.5480	5.155	542.8
82	4.0000	.97500	62.000	.7540-01	.7160-01	.7790-01	.8810-03	.8221-03	.9191-03	.5590	4.932	542.8

DATE 07 OCT 75

OH-7A (AEDC V4:9-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 234

OH-7A (AEDC V4:9-B8A) B62C12F10H16W127E52VRR19

(RYB003)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T0) BTU/ R FT2SEC	H1T0) BTU/ R FT2SEC	H1TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TM DEG. P
82	4.0000	.45000	62.000	.4420-01	.3600-01	.4990-01	.6669-03	.5426-03	.7533-03	.3410	4.414	542.4
82	4.0000	.47500	63.000	.3560-01	.2900-01	.4020-01	.5368-03	.4367-03	.6063-03	.2740	3.492	542.4
82	4.1300	.50000	64.000	.2560-01	.2090-01	.2900-01	.3867-03	.3148-03	.4367-03	.1980	2.452	541.4
82	4.0000	.52500	65.070	.2110-01	.1720-01	.2389-01	.3180-03	.2588-03	.3591-03	.1630	2.015	541.7
82	4.0000	.55000	66.000	.1850-01	.1510-01	.2090-01	.2792-03	.2273-03	.3153-03	.1430	1.678	541.3
82	4.0000	.60000	67.000	.1070-01	.8700-02	.1200-01	.1609-03	.1310-03	.1817-03	.8200-01	.9290	541.0
82	4.0000	.65000	68.000	.8903-C2	.7200-02	.1000-01	.1342-03	.1092-03	.1515-03	.6900-01	.8060	541.1
82	4.0000	.70000	69.000	.6400-02	.5200-02	.7200-02	.9578-04	.7795-04	.1082-03	.4900-01	.5460	541.7
82	4.0000	.75000	70.000	.7000-02	.5700-02	.7900-02	.1077-03	.8606-04	.1194-03	.5400-01	.6030	541.4
82	4.0000	.80000	75.000	.3900-02	.3200-02	.4400-02	.5892-04	.4795-04	.6653-04	.3000-01	.3630	541.4
82	4.0000	.87500	77.000	.3200-02	.2600-02	.3600-02	.4798-04	.3906-04	.5418-04	.2500-01	.3220	541.2
82	4.0000	.90000	78.000	.4400-02	.3600-02	.5000-02	.6614-04	.5383-04	.7468-04	.3400-01	.4390	541.4
82	4.0000	.92500	79.000	.3200-02	.2600-02	.3600-02	.4756-04	.3871-04	.5370-04	.2400-01	.3020	541.4
82	4.0000	.95000	80.000	.0000	.0000	.0000	.3375-09	.2748-09	.3809-09	.0000	.0000	540.7

04-74 1AEDC V418-B8A) 862C12F10M16W127E52V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

COFA	-	3	000	MACH	=	8	000	ELEVON	=	.0000	RUDDER	=	.0000
------	---	---	-----	------	---	---	-----	--------	---	-------	--------	---	-------

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
7	0.86	-1.9	25.20	1.72	-159.2	2.000	87.20	9000-02	4070	3605.	.9014-05	.7020-07

STN NO	R=	H-REF	RS/L	RUN
0175	0.0175	BTU/ R	X10 6	NUMBER
1519-01	FT2SEC		/FT	
5962-01		1519-01	4630	01

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF A=1.0	H/HREF R-TAN	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TM DEG. R
83	1.0000	.27500	1.0000	.3620-01	.2950-01	.4090-01	.5575-03	.4540-03	.6293-03	.2860	2.969	540.0
83	1.0000	.30000	2.0000	.3060-01	.2490-01	.3450-01	.4707-03	.3833-03	.5313-03	.2410	2.566	540.1
83	1.0000	.32500	3.0000	.2900-01	.2360-01	.3280-01	.4465-03	.3636-03	.5040-03	.2290	2.357	539.9
83	1.0000	.35000	4.0000	.3150-01	.2560-01	.3550-01	.4843-03	.3944-03	.5466-03	.2470	2.581	539.7
83	1.0000	.37500	5.0000	.3130-01	.2650-01	.3530-01	.4816-03	.3921-03	.5436-03	.2490	2.599	540.4
83	1.0000	.40000	6.0000	.3130-01	.2760-01	.3820-01	.5212-03	.4244-03	.5883-03	.2670	2.749	540.2
83	1.0000	.42500	7.0000	.3830-01	.3120-01	.4330-01	.5896-03	.4800-03	.6657-03	.3020	3.135	540.7
83	1.0000	.45000	8.0000	.4950-01	.4030-01	.5590-01	.7615-03	.6199-03	.8997-03	.3900	3.992	540.9
83	1.0000	.47500	9.0000	.5020-01	.4080-01	.5670-01	.7723-03	.6295-03	.8720-03	.3950	4.025	541.4
83	1.0000	.50000	10.0000	.5510-01	.4490-01	.6230-01	.8486-03	.6908-03	.9581-03	.4350	4.409	540.8
83	1.0000	.52500	11.0000	.6210-01	.5050-01	.7010-01	.9525-03	.7778-03	.1079-02	.4890	4.961	541.1
83	1.0000	.55000	12.0000	.6430-01	.5240-01	.7260-01	.9898-03	.8057-03	.1180-02	.5070	5.094	541.0
83	1.0000	.57500	13.0000	.6900-01	.5620-01	.7800-01	.1062-02	.8644-03	.1200-02	.5430	5.503	541.9
83	1.0000	.60000	14.0000	.6520-01	.5310-01	.7360-01	.1003-02	.8165-03	.1133-02	.5130	5.205	541.4
83	1.0000	.65000	15.0000	.4520-01	.3680-01	.5100-01	.6951-03	.5657-03	.7849-03	.3560	3.479	541.4
83	1.0000	.70000	16.0000	.3020-01	.2460-01	.3410-01	.4655-03	.3789-03	.5254-03	.2390	2.420	540.5
83	1.0000	.75000	17.0000	.1670-01	.1670-01	.2310-01	.3149-03	.2563-03	.3355-03	.1610	1.563	541.2
83	1.0000	.80000	18.0000	.2050-01	.2870-01	.3980-01	.5422-03	.4416-03	.61.9-03	.2780	3.271	539.7
83	2.0000	.28500	18.0000	.3520-01	.2750-01	.3810-01	.5200-03	.4234-03	.5869-03	.2670	3.151	539.9
83	2.0000	.33700	19.0000	.3380-01	.3770-01	.5230-01	.7126-03	.5862-03	.8043-03	.3660	4.318	540.0
83	2.0000	.39000	20.0000	.4630-01	.3770-01	.5230-01	.7126-03	.5862-03	.8043-03	.3660	4.318	540.0
83	2.0000	.42600	21.0000	.6450-01	.5250-01	.7280-01	.9925-03	.6078-03	.1121-02	.5080	5.962	541.4
83	2.0000	.47800	22.0000	.7860-01	.6400-01	.8870-01	.1209-02	.9843-03	.1365-02	.6190	6.904	541.2

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 236

(RY8003)

OH-7A (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-7A (AEDC V418-B8A) B62C12F10M16H12T5E2VBR19

DATE 07 OCT 75

RUN NUMBER	TRAJ ²	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H1ST0 BTU/ R	H1T0 BTU/ R	H1TAM BTU/ R	QDOT BTU/	DTNOT DEG. R	TM DEG. R
83	2.0000	.53000	23.000	.7950-01	.6470-01	.6980-01	.1223-02	.9451-03	.1381-02	.6250	6.965	542.2
83	2.0000	.56700	24.000	.6360-01	.5180-01	.7180-01	.9789-03	.7967-03	.1105-02	.5010	5.451	541.3
83	2.0000	.62000	25.000	.4080-01	.3320-01	.4600-01	.6273-03	.5107-03	.7062-03	.3210	3.499	540.7
83	2.0000	.67000	26.000	.2540-01	.2070-01	.2870-01	.3907-03	.3181-03	.4410-03	.2000	2.180	540.4
83	2.0000	.70500	27.000	.1990-01	.1620-01	.2250-01	.3064-03	.2495-03	.3458-03	.1570	1.695	540.0
83	2.0000	.75000	28.000	.1440-01	.1190-01	.1630-01	.2221-03	.1799-03	.2507-03	.1140	1.256	539.2
83	2.0000	.80000	29.000	.1170-01	.9600-02	.1330-01	.1807-03	.1472-03	.2040-03	.9300-01	1.025	539.7
83	2.0000	.82400	30.000	.5100-02	.4100-02	.5700-02	.7820-04	.6366-04	.8829-04	.4000-01	.5590	540.8
83	3.0000	.20000	31.000	.7210-01	.5870-01	.8150-01	.1110-02	.9029-03	.1254-02	.9660	6.003	543.5
83	3.0000	.22500	32.000	.5820-01	.4820-01	.6690-01	.9112-03	.7415-03	.1029-02	.4660	5.219	541.9
83	3.0000	.25000	33.000	.4420-01	.3600-01	.4990-01	.6799-03	.5535-03	.7674-03	.3480	3.909	540.4
83	3.0000	.27500	34.000	.3730-01	.3040-01	.4210-01	.5743-03	.4677-03	.6482-03	.2950	3.539	539.7
83	3.0000	.30000	35.000	.3350-01	.2730-01	.3780-01	.5194-03	.4198-03	.5816-03	.2650	3.287	539.1
83	3.0000	.32500	36.000	.3520-01	.2870-01	.3980-01	.5420-03	.4415-03	.6117-03	.2780	3.273	539.2
83	3.0000	.35000	37.000	.4080-01	.3320-01	.4610-01	.6280-03	.5114-03	.7088-03	.3220	3.748	539.7
83	3.0000	.37500	38.000	.6190-01	.5040-01	.6990-01	.9532-03	.7762-03	.1076-02	.4890	5.745	540.1
83	3.0000	.40000	39.000	.6820-01	.5550-01	.7700-01	.1050-02	.8546-03	.1185-02	.5380	6.356	540.2
83	3.0000	.42500	40.000	.8940-01	.7280-01	.1009	.1376-02	.1120-02	.1553-02	.7050	8.365	540.7
83	3.0000	.45000	41.000	.8900-01	.7250-01	.1005	.1370-02	.1115-02	.1547-02	.7020	8.032	540.8
83	3.0000	.47500	42.000	.7540-01	.6460-01	.8970-01	.1222-02	.9948-03	.1380-02	.6260	6.978	541.1
83	3.0000	.50000	43.000	.6730-01	.5480-01	.7590-01	.1035-02	.8425-03	.1169-02	.5300	5.911	541.1
83	3.0000	.52500	44.000	.5050-01	.4110-01	.5700-01	.7768-03	.6326-03	.8767-03	.3990	4.684	539.9
83	3.0000	.55000	45.000	.3890-01	.3170-01	.4390-01	.5990-03	.4877-03	.6761-03	.3070	3.430	540.0
83	3.0000	.60000	46.000	.2390-01	.1950-01	.2700-01	.3677-03	.2995-03	.4149-03	.1890	2.058	539.2
83	3.0000	.63000	47.000	.1670-01	.1360-01	.1890-01	.2577-03	.2099-03	.2908-03	.1320	1.408	539.3
83	3.0000	.70000	48.000	.1240-01	.1010-01	.1400-01	.1906-03	.1553-03	.2151-03	.9800-01	1.084	538.9
83	3.0000	.75000	49.000	.9810-02	.8000-02	.8600-02	.1510-03	.1230-03	.1704-03	.7800-01	.8450	539.2
83	3.0000	.80000	50.000	.7700-02	.6200-02	.6600-02	.1179-03	.9601-04	.1330-03	.6100-01	.6500	539.3
83	3.0000	.85000	51.000	.6900-02	.5600-02	.7800-02	.1062-03	.8649-04	.1200-03	.5400-01	.6740	541.0
83	3.0000	.87500	52.000	.1120-01	.9100-02	.1270-01	.1725-03	.1404-03	.1948-03	.8800-01	1.095	540.9
83	3.0000	.90000	53.000	.1230-01	.1000-01	.1390-01	.1894-03	.1542-03	.2139-03	.9700-01	1.352	541.2
83	3.0000	.92500	54.000	.1350-01	.1100-01	.1530-01	.2082-03	.1694-03	.2350-03	.1070	1.398	541.1
83	3.0000	.95000	55.000	.1370-01	.1110-01	.1540-01	.2103-03	.1712-03	.2374-03	.1060	1.092	540.8
83	4.0000	.20600	71.000	.7750-01	.6300-01	.8763-01	.1192-02	.9688-03	.1348-02	.6050	6.903	545.8
83	4.0000	.22500	72.000	.6070-01	.4930-01	.6850-01	.9334-03	.7592-03	.1054-02	.4760	5.586	542.9
83	4.0000	.25000	73.000	.4440-01	.3610-01	.5010-01	.6827-03	.5556-03	.7709-03	.3490	4.099	541.6
83	4.0000	.27500	74.000	.3980-01	.3240-01	.4500-01	.6130-03	.4990-03	.6821-03	.3140	3.890	541.1
83	4.0000	.30000	75.000	.4050-01	.3300-01	.4580-01	.6240-03	.5081-03	.7043-03	.3200	4.205	539.8
83	4.0000	.32500	57.000	.6300-01	.5130-01	.7120-01	.9702-03	.7897-03	.1095-02	.4970	6.520	540.9
83	4.0000	.35000	58.000	.9220-01	.7500-01	.1041	.1419-02	.1155-02	.1602-02	.7260	9.527	541.3
83	4.0000	.37500	59.000	.9160-01	.7450-01	.1033	.1409-02	.1147-02	.1590-02	.7220	9.486	540.2
83	4.0000	.40000	60.000	.6480-01	.5280-01	.7310-01	.9873-03	.8120-03	.1126-02	.5110	6.715	540.2
83	4.0000	.42500	61.000	.4490-01	.3650-01	.5060-01	.6906-03	.5625-03	.7794-03	.3550	4.661	539.3

DATE 07 OCT 75

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 237

04-74 (AEDC V41B-88A) B62C12F10H16H127E52V8R19

(RV8003)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H19TD BTU/ R FT2SEC	H1TD BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	ODOT BTU/ R FT2SEC	DTNOT DEG. R /SEC	TH DEG. R
83	4.0000	.45000	62.000	.2980-01	.2420-01	.3350-01	.4578-03	.3729-03	.5167-03	.2350	3.052	539.4
83	4.0000	.47500	63.000	.2380-01	.1940-01	.2690-01	.3668-03	.2988-03	.4139-03	.1880	2.405	539.2
83	4.0000	.50000	64.000	.1930-01	.1570-01	.2170-01	.2966-03	.2415-03	.3347-03	.1520	1.890	539.3
83	4.0000	.52500	65.000	.1590-01	.1290-01	.1790-01	.2440-03	.1987-03	.2753-03	.1250	1.554	539.4
83	4.0000	.55000	66.000	.1110-01	.9400-02	.1300-01	.1778-03	.1448-03	.2006-03	.9100-01	1.073	539.4
83	4.0000	.60000	67.000	.9900-02	.8100-02	.1120-01	.1524-03	.1241-03	.1720-03	.7800-01	.8830	539.3
83	4.0000	.65000	68.000	.8100-02	.6600-02	.9100-02	.1239-03	.1009-03	.1398-03	.6400-01	.7480	539.3
83	4.0000	.70000	69.000	.5100-02	.4200-02	.5800-02	.7898-04	.6431-04	.8915-04	.4103-01	.4520	540.2
83	4.0000	.75000	70.000	.6300-02	.4900-02	.6800-02	.9304-04	.7578-04	.1050-03	.4800-01	.5340	539.2
83	4.0000	.80000	75.000	.4200-02	.3500-02	.4800-02	.6527-04	.5315-04	.7366-04	.3330-01	.4040	539.8
83	4.0000	.85000	76.000	.1500-02	.1200-02	.1700-02	.2327-04	.1896-04	.2625-04	.1700-01	.1420	538.2
83	4.0000	.87500	77.000	.4700-02	.3900-02	.5400-02	.7299-04	.5945-04	.8237-04	.3700-01	.4930	539.3
83	4.0000	.90000	78.000	.5300-02	.4300-02	.6000-02	.8183-04	.6664-04	.9235-04	.4200-01	.5450	539.6
83	4.0000	.92500	79.000	.6100-02	.5000-02	.6900-02	.9389-04	.7647-04	.1060-03	.4800-01	.5980	539.3
83	4.0000	.95000	80.000	.5700-02	.4600-02	.6400-02	.8739-04	.7116-04	.9444-04	.4500-01	.5270	540.0

04-74 (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

DATE 07 OCT 75

(RV8003)

04-74 (AEDC V418-88A) 802C12F10M16W127E52V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	Y DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
84	7.800	29.83	81.80	1189.	-90.00	2.000	87.10	.8000-02	.4020	2804.	.8602-08	.7014-07

RUN NUMBER	RV/L X10 6 /FT	WREF BTU/ R FT ² SEC	STN NO R= .0175
84	.574	.1528-01	.5999-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(19T) BTU/ R FT ² SEC	H(1T) BTU/ R FT ² SEC	H(17AH) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTMDT DEG. R /SEC	TH DEG. R
84	1.0000	.27500	1.0000	.1520-01	.1240-01	.1720-01	.2322-03	.1889-03	.2623-03	.1180	1.227	542.5
84	1.0000	.30000	2.0000	.1440-01	.1170-01	.1620-01	.2196-03	.1767-03	.2481-03	.1120	1.189	542.2
84	1.0000	.32500	3.0000	.1290-01	.1050-01	.1450-01	.1973-03	.1606-03	.2229-03	.1010	1.036	541.5
84	1.0000	.35000	4.0000	.1370-01	.1110-01	.1540-01	.2087-03	.1698-03	.2357-03	.1070	1.105	541.7
84	1.0000	.37500	5.0000	.1120-01	.9100-02	.1260-01	.1708-03	.1389-03	.1930-03	.8700-01	.9150	542.6
84	1.0000	.40000	6.0000	.1710-01	.1390-01	.1930-01	.2616-03	.2128-03	.2855-03	.1330	1.370	542.4
84	1.0000	.42500	7.0000	.1920-01	.1560-01	.2170-01	.2938-03	.2389-03	.3319-03	.1490	1.950	543.
84	1.0000	.45000	8.0000	.2550-01	.2080-01	.2890-01	.3905-03	.3176-03	.4412-03	.1980	2.032	543.2
84	1.0000	.47500	9.0000	.2450-01	.1990-01	.2770-01	.3749-03	.3048-03	.4236-03	.1910	1.939	543.7
84	1.0000	.50000	10.000	.3420-01	.2780-01	.3860-01	.5224-03	.4247-03	.5903-03	.2660	2.690	543.7
84	1.0000	.52500	11.000	.3680-01	.2990-01	.4160-01	.5621-03	.4561-03	.6351-03	.2860	2.892	544.0
84	1.0000	.55000	12.000	.2540-01	.2070-01	.2870-01	.3888-03	.3160-03	.4391-03	.1980	1.983	543.7
84	1.0000	.60000	13.000	.1490-01	.1210-01	.1690-01	.2282-03	.1955-03	.2578-03	.1160	1.176	543.4
84	1.0000	.65000	14.000	.1120-01	.9100-02	.1270-01	.1713-03	.1393-03	.1935-03	.8700-01	.6830	543.5
84	1.0000	.70000	15.000	.9000-02	.7300-02	.1020-01	.1379-03	.1121-03	.1557-03	.7000-01	.6860	543.1
84	1.0000	.75000	16.000	.5400-02	.4400-02	.6100-02	.8239-04	.6700-04	.9307-04	.4200-01	.4250	542.9
84	1.0000	.80000	17.000	.5000-02	.4100-02	.5600-02	.7643-04	.6216-04	.8634-04	.3900-01	.3770	542.9
84	1.0000	.85000	18.000	.1550-01	.1260-01	.1750-01	.2367-03	.1926-03	.2674-03	.1210	1.415	542.7
84	2.0000	.26300	19.000	.1870-01	.1380-01	.1890-01	.2557-03	.2079-03	.2888-03	.1320	1.537	542.5
84	2.0000	.33700	20.000	.2750-01	.2230-01	.3100-01	.4197-03	.3413-03	.4742-03	.2140	2.518	543.4
84	2.0000	.39000	21.000	.3650-01	.2970-01	.4130-01	.5526-03	.4540-03	.6313-03	.2830	3.323	544.6
84	2.0000	.42600	22.000	.3510-01	.2850-01	.3960-01	.5357-03	.4355-03	.6054-03	.2720	3.031	544.2

(RV8003)

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) 862C12F10H18M127E52V8R19

RUN NUMBER	TRAJ'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	M18T0 BTU/ R F12SEC	M17T0 BTU/ R F12SEC	M16T0 BTU/ R F12SEC	QDOT BTU/ F12SEC	DTNOT DEG. R /SEC	TH DEG. R
84	2.0000	.53000	23.000	.1930-01	.1570-01	.2180-01	.2547-03	.2196-03	.3330-03	.1500	1.669	543.9
84	2.0000	.56700	24.000	.1410-01	.1150-01	.1600-01	.2160-03	.1756-03	.2440-03	.1100	1.195	543.1
84	2.0000	.62000	25.000	.1190-01	.0970-02	.1340-01	.1818-03	.1479-03	.2094-03	.9300-01	1.007	542.8
84	2.0000	.67000	26.000	.8100-02	.6600-02	.9200-02	.1242-03	.1010-03	.1402-03	.6300-01	.6900	541.7
84	2.0000	.70500	27.000	.7200-02	.5800-02	.8100-02	.1097-03	.8926-04	.1239-03	.5600-01	.6040	541.4
84	2.0000	.75000	28.000	.6000-02	.4900-02	.6800-02	.9200-04	.7486-04	.1039-03	.4700-01	.5180	541.5
84	2.0000	.80000	29.000	.4600-02	.3800-02	.5200-02	.7046-04	.5733-04	.7956-04	.3600-01	.3970	541.5
84	2.0000	.82400	30.000	.6000-03	.5000-03	.7000-03	.9041-05	.7357-05	.1021-04	.5000-02	.6400-01	541.4
84	3.0000	.20000	31.000	.3290-01	.2670-01	.3720-01	.5033-03	.4087-03	.5691-03	.2540	2.695	546.7
84	3.0000	.22500	32.000	.2790-01	.2270-01	.3160-01	.4271-03	.3471-03	.4828-03	.2160	2.422	545.2
84	3.0000	.25000	33.000	.2270-01	.1840-01	.2550-01	.3466-03	.2818-03	.3917-03	.1760	1.971	544.1
84	3.0000	.27500	34.000	.1780-01	.1450-01	.2010-01	.2722-03	.2214-03	.2928-03	.1320	1.636	542.5
84	3.0000	.30000	35.000	.1700-01	.1390-01	.1920-01	.2592-03	.2108-03	.3075-03	.1390	1.681	543.1
84	3.0000	.32500	36.000	.1890-01	.1540-01	.2140-01	.2892-03	.2352-03	.3257-03	.1470	1.729	542.6
84	3.0000	.35000	37.000	.2530-01	.2060-01	.2860-01	.3864-03	.3142-03	.4364-03	.1970	2.284	542.8
84	3.0000	.37500	38.000	.3670-01	.2990-01	.4150-01	.5613-03	.4563-03	.6342-03	.2850	3.345	543.9
84	3.0000	.40000	39.000	.3110-01	.2530-01	.3520-01	.4761-03	.3871-03	.5378-03	.2420	2.856	543.3
84	3.0000	.42500	40.000	.2950-01	.2400-01	.3330-01	.4510-03	.3667-03	.5096-03	.2280	2.717	543.8
84	3.0000	.45000	41.000	.2460-01	.2000-01	.2780-01	.3769-03	.3062-03	.4294-03	.1920	2.190	543.2
84	3.0000	.47500	42.000	.1950-01	.1580-01	.2200-01	.2976-03	.2420-03	.3363-03	.1510	1.687	543.5
84	3.0000	.50000	43.000	.1430-01	.1160-01	.1620-01	.2186-03	.1778-03	.2470-03	.1110	1.240	543.2
84	3.0000	.52500	44.000	.1140-01	.0920-02	.1280-01	.1738-03	.1413-03	.1963-03	.8900-01	1.039	542.6
84	3.0000	.55000	45.000	.1010-01	.0820-02	.1140-01	.1541-03	.1254-03	.1741-03	.7900-01	.8750	542.0
84	3.0000	.57500	46.000	.7800-02	.6400-02	.8800-02	.1194-03	.9711-04	.1348-03	.6100-01	.520	542.0
84	3.0000	.60000	47.000	.5400-02	.4400-02	.6100-02	.8284-04	.6740-04	.9355-04	.4200-01	.4490	541.6
84	3.0000	.62500	48.000	.3900-02	.3100-02	.4400-02	.5913-04	.4812-04	.6677-04	.3000-01	.3340	541.2
84	3.0000	.65000	49.000	.4000-02	.3200-02	.4500-02	.6065-04	.4937-04	.6848-04	.3100-01	.3380	540.8
84	3.0000	.67500	50.000	.2300-02	.1800-02	.2600-02	.3471-04	.2825-04	.3919-04	.1800-01	.1900	540.7
84	3.0000	.70000	51.000	.1700-02	.1400-02	.1900-02	.2544-04	.2086-04	.2896-04	.1300-01	.1620	542.2
84	3.0000	.72500	52.000	.2100-02	.1700-02	.2400-02	.3223-04	.2622-04	.3641-04	.1600-01	.2290	542.6
84	3.0000	.75000	53.000	.2400-02	.2000-02	.2800-02	.3734-04	.3037-04	.4218-04	.1600-01	.2490	541.7
84	3.0000	.77500	54.000	.1100-02	.0900-03	.1300-02	.1723-04	.1402-04	.1945-04	.9000-02	.8900-01	541.7
84	4.0000	.20000	71.000	.3910-01	.3170-01	.4420-01	.5971-03	.4845-03	.6756-03	.3000	3.424	548.9
84	4.0000	.22500	72.000	.3010-01	.2450-01	.3410-01	.4607-03	.3742-03	.5209-03	.2330	2.728	546.5
84	4.0000	.25000	73.000	.2440-01	.1990-01	.2760-01	.3734-03	.3035-03	.4220-03	.1890	2.221	544.7
84	4.0000	.27500	74.000	.2310-01	.1880-01	.2610-01	.3529-03	.2868-03	.3987-03	.1790	2.219	544.0
84	4.0000	.30000	75.000	.2130-01	.1730-01	.2400-01	.3249-03	.2642-03	.3670-03	.1650	2.168	543.1
84	4.0000	.32500	76.000	.3340-01	.2710-01	.3770-01	.5098-03	.4144-03	.5751-03	.2590	3.393	544.2
84	4.0000	.35000	77.000	.3310-01	.2690-01	.3750-01	.5066-03	.4118-03	.5725-03	.2570	3.371	544.3
84	4.0000	.37500	78.000	.2250-01	.1830-01	.2550-01	.3444-03	.2801-03	.3891-03	.1750	2.298	543.2
84	4.0000	.40000	79.000	.1590-01	.1300-01	.1800-01	.2436-03	.1981-03	.2752-03	.1240	1.626	543.1
84	4.0000	.42500	80.000	.1210-01	.0900-02	.1360-01	.1842-03	.1498-03	.2080-03	.9400-01	1.230	542.7
84	4.0000	.45000	81.000	.9300-02	.7500-02	.1060-01	.1429-03	.1162-03	.1614-03	.7300-01	.9430	542.8

DATE 07 OCT 75

OH-74 (AEDC V41B-SBA) HEATING DATA ON ORBITTER FUSELAGE PORT SIDE

PAGE 240

OH-74 (AEDC V41B-SBA) 862C12F10M16W127E52V8R19

(RV8003)

RUN NUMBER	TRATE	X/L	T/C NO	H/HREF R=0.9	H/HREF K=1.0	H/HREF R-TAM	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TM DEG. R
84	4.0000	.47500	63.000	.7400-02	.6000-02	.8300-02	.1129-03	.9184-04	.1275-03	.5800-01	.7330	542.6
84	4.0000	.50000	64.000	.5900-02	.4800-02	.6600-02	.8983-04	.7308-04	.1015-03	.4600-01	.5680	542.0
84	4.0000	.52500	65.000	.4200-02	.3400-02	.4800-02	.6471-04	.5265-04	.7309-04	.3300-01	.4080	541.8
84	4.0000	.55000	66.000	.4700-02	.3800-02	.5300-02	.7199-04	.5856-04	.8129-04	.3700-01	.4320	541.3
84	4.0000	.60000	67.000	.3100-02	.2300-02	.3500-02	.4707-04	.3831-04	.5315-04	.2400-01	.2710	540.7
84	4.0000	.65000	68.000	.2600-02	.2100-02	.2500-02	.3935-04	.3202-04	.4443-04	.2000-01	.2360	540.9
84	4.0000	.70000	69.000	.1300-02	.1100-02	.1500-02	.2059-04	.1675-04	.2329-04	.1100-01	.1170	541.7
84	4.0000	.75000	70.000	.2000-02	.1600-02	.2300-02	.3077-04	.2505-04	.3474-04	.1600-01	.1760	540.3
84	4.0000	.80000	71.000	.1100-02	.9000-03	.1300-02	.1712-04	.1393-04	.1933-04	.9000-02	.1060	540.8
84	4.0000	.85000	75.000	.5000-02	.4100-02	.5600-02	.7609-04	.6196-04	.8989-04	.3900-01	.4630	539.7
84	4.0000	.87500	77.000	.5000-03	.4000-03	.6000-03	.8153-05	.6637-05	.9204-05	.4000-02	.5500-01	540.3
84	4.0000	.90000	78.000	.1000-03	.1000-03	.2000-03	.2247-05	.1829-05	.2537-05	.1000-02	.1500-01	540.5
84	4.0000	.92500	79.000	.6100-02	.5000-02	.6900-02	.9389-04	.7847-04	.1060-03	.4800-01	.5980	539.3
84	4.0000	.95000	80.000	.5700-02	.4600-02	.6400-02	.8739-04	.7116-04	.9864-04	.4500-01	.5270	540.0

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

DATE 07 OCT 72

OH-74 (AEDC V41B-88A) 882C12F10H184127532V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUOS /FT3	MU LB-SEC /FT2
86	7.980	34.85	80.90	1168.	158.2	2.000	87.00	.9000-02	.3970	3602.	.8812-05	.7008-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC /FT	SIN NO R= .0175 .6029-01
86	.4530	.1520-01	.6029-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TM DEG. R
86	1.0000	.27500	1.0000	.1680-01	.1360-01	.1890-01	.2547-03	.2072-03	.2876-03	.1300	1.346	541.8
86	1.0000	.30000	2.0000	.1370-01	.1110-01	.1540-01	.2078-03	.1691-03	.2347-03	.1060	1.126	541.3
86	1.0000	.32500	3.0000	.1160-01	.9400-02	.1310-01	.1762-03	.1434-03	.1989-03	.9600-01	.9240	541.0
86	1.0000	.35000	4.0000	.1140-01	.1140-01	.1580-01	.2123-03	.1728-03	.2397-03	.1080	1.125	540.5
86	1.0000	.37500	5.0000	.1600-01	.1300-01	.1810-01	.2432-03	.1979-03	.2746-03	.1240	1.306	541.0
86	1.0000	.40000	6.0000	.2460-01	.2000-01	.2780-01	.3740-03	.3044-03	.4223-03	.1910	1.964	540.5
86	1.0000	.42500	7.0000	.2340-01	.1900-01	.2640-01	.3557-03	.2894-03	.4017-03	.1810	1.883	541.1
86	1.0000	.45000	8.0000	.2530-01	.2060-01	.2850-01	.3838-03	.3123-03	.4335-03	.1960	2.004	541.0
86	1.0000	.47500	9.0000	.3190-01	.2600-01	.3610-01	.4855-03	.3950-03	.5483-03	.2480	2.522	541.3
86	1.0000	.50000	10.000	.2400-01	.1950-01	.2710-01	.3647-03	.2968-03	.4119-03	.1860	1.888	540.9
86	1.0000	.52500	11.000	.2230-01	.1820-01	.2520-01	.3392-03	.2760-03	.3831-03	.1730	1.755	541.0
86	1.0000	.55000	12.000	.2100-01	.1710-01	.2380-01	.3198-03	.2602-03	.3611-03	.1630	1.641	540.7
86	1.0000	.60000	13.000	.1450-01	.1180-01	.1640-01	.2208-03	.1797-03	.2493-03	.1130	1.144	540.5
86	1.0000	.65000	14.000	.1340-01	.1090-01	.1510-01	.2038-03	.1659-03	.2302-03	.1040	1.055	541.0
86	1.0000	.70000	15.000	.9900-02	.8100-02	.9800-02	.1317-03	.1072-03	.1487-03	.7700-01	.7530	540.8
86	1.0000	.75000	16.000	.8700-02	.7100-02	.8600-02	.1227-03	.1227-03	.1702-03	.6700-01	.6820	540.8
86	1.0000	.80000	17.000	.5600-02	.4500-02	.6300-02	.8452-04	.6878-04	.9544-04	.4300-01	.4190	540.6
86	1.0000	.85000	18.000	.1790-01	.1460-01	.2020-01	.2718-03	.2211-03	.3070-03	.1390	1.626	541.6
86	2.0000	.28500	19.000	.1840-01	.1500-01	.2080-01	.2793-03	.2273-03	.3154-03	.1430	1.683	541.0
86	2.0000	.33700	20.000	.3360-01	.2730-01	.3790-01	.5099-03	.4149-03	.5758-03	.2600	3.071	541.0
86	2.0000	.39000	21.000	.2940-01	.2390-01	.3320-01	.4467-03	.3635-03	.5045-03	.2280	2.578	540.7
86	2.0000	.42600	22.000	.2090-01	.1700-01	.2360-01	.3175-03	.2585-03	.3585-03	.1620	1.810	540.4

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 242

(RV8003)

OH-74 (AEDC V41B-88A) B62C12F101614127E52V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H/GTO FT/SEC	H/TOT BTU/R	H/TAM BTU/R	QDOT BTU/ FT/SEC	DTWOT DEG. R	TH DEG. R
86	2.0000	.53000	23.000	.1580-01	.1290-01	.1790-01	.2406-03	.1958-03	.2716-03	.1230	1.371	540.5
86	2.0000	.56700	24.000	.1300-01	.1060-01	.1470-01	.1976-03	.1609-03	.2231-03	.1010	1.101	539.8
86	2.0000	.62000	25.000	.0700-02	.7900-02	.1090-01	.1473-03	.1199-03	.1653-03	.7500-01	.8200	540.2
86	2.0000	.67000	26.000	.7400-02	.6100-02	.8400-02	.1132-03	.9213-04	.1278-03	.5800-01	.6300	539.8
86	2.0000	.70500	27.000	.6500-02	.5300-02	.7400-02	.9896-04	.8056-04	.1117-03	.5100-01	.5460	539.5
86	2.0000	.75000	28.000	.5700-02	.4600-02	.6400-02	.9806-04	.7007-04	.5549-04	.4400-01	.4840	539.8
86	2.0000	.80000	29.000	.3200-02	.2600-02	.3700-02	.4915-04	.4001-04	.5549-04	.2500-01	.2780	539.9
86	2.0000	.82400	30.000	.8000-03	.7000-03	.1000-02	.1282-04	.1044-04	.1448-04	.7000-02	.9100-01	545.9
86	3.0000	.20000	31.000	.3510-01	.2850-01	.3970-01	.5331-03	.4330-03	.6027-03	.2690	2.855	544.5
86	3.0000	.22500	32.000	.2940-01	.2390-01	.3320-01	.4468-03	.3631-03	.5050-03	.2260	2.534	543.0
86	3.0000	.25000	33.000	.2300-01	.1870-01	.2600-01	.3502-03	.2847-03	.3956-03	.1780	1.993	542.0
86	3.0000	.27500	34.000	.1960-01	.1590-01	.2210-01	.2974-03	.2419-03	.3380-03	.1510	1.816	541.0
86	3.0000	.30000	35.000	.1720-01	.1400-01	.1940-01	.2607-03	.2122-03	.2944-03	.1330	1.649	540.5
86	3.0000	.32500	36.000	.2270-01	.1850-01	.2570-01	.3457-03	.2813-03	.3903-03	.1770	2.074	541.0
86	3.0000	.35000	37.000	.3450-01	.2810-01	.3900-01	.5244-03	.4268-03	.5922-03	.2680	3.110	540.7
86	3.0000	.37500	38.000	.3250-01	.2640-01	.3670-01	.4936-03	.4017-03	.5573-03	.2520	2.960	539.5
86	3.0000	.40000	39.000	.2260-01	.1840-01	.2550-01	.3433-03	.2796-03	.3875-03	.1760	2.075	539.8
86	3.0000	.42500	40.000	.2270-01	.1850-01	.2560-01	.3452-03	.2810-03	.3897-03	.1770	2.097	539.5
86	3.0000	.45000	41.000	.1870-01	.1520-01	.2110-01	.2637-03	.2310-03	.3203-03	.1450	1.662	539.2
86	3.0000	.47500	42.000	.1450-01	.1180-01	.1640-01	.2211-03	.1800-03	.2495-03	.1130	1.264	539.2
86	3.0000	.50000	43.000	.1330-01	.1080-01	.1500-01	.2016-03	.1642-03	.2276-03	.1030	1.152	539.0
86	3.0000	.52500	44.000	.1040-01	.8500-02	.1180-01	.1582-03	.1288-03	.1786-03	.8100-01	.9530	538.8
86	3.0000	.55000	45.000	.9600-02	.7800-02	.1090-01	.1461-03	.1190-03	.1649-03	.7500-01	.8360	538.7
86	3.0000	.60000	46.000	.7200-02	.5900-02	.8100-02	.1095-03	.8914-04	.1235-03	.5600-01	.6110	538.8
86	3.0000	.65000	47.000	.5000-02	.4100-02	.5700-02	.7648-04	.6228-04	.8631-04	.3900-01	.4170	538.9
86	3.0000	.70000	48.000	.3700-02	.3000-02	.4200-02	.5590-04	.4552-04	.5206-04	.2900-01	.3170	539.8
86	3.0000	.75000	49.000	.3000-02	.2500-02	.3400-02	.4613-04	.3756-04	.4394-04	.2400-01	.2570	539.4
86	3.0000	.80000	50.000	.2600-02	.2100-02	.2900-02	.3892-04	.3169-04	.4394-04	.2000-01	.2140	540.7
86	3.0000	.87500	52.000	.7000-03	.6000-03	.8000-03	.1132-04	.9213-05	.1278-04	.6000-02	.7200-01	541.0
86	3.0000	.90000	53.000	.1000-02	.8000-03	.1100-02	.1524-04	.1240-04	.1721-04	.8000-02	.1080	540.5
86	3.0000	.92500	54.000	.7000-03	.6000-03	.8000-03	.1103-04	.8978-05	.1246-04	.6000-02	.7400-01	547.9
86	3.0000	.95000	55.000	.9000-03	.7000-03	.1000-02	.1324-04	.1077-04	.1495-04	.7000-02	.6900-01	544.0
86	4.0000	.20000	71.000	.4160-01	.3370-01	.4700-01	.6315-03	.5125-03	.7144-03	.3180	3.624	545.4
86	4.0000	.22500	72.000	.2990-01	.2430-01	.3390-01	.4551-03	.3697-03	.5145-03	.2300	2.697	542.9
86	4.0000	.25000	73.000	.2450-01	.1900-01	.2650-01	.3560-03	.2895-03	.4022-03	.1810	2.241	542.1
86	4.0000	.27500	74.000	.2340-01	.1900-01	.2650-01	.3560-03	.2895-03	.4022-03	.1810	2.241	542.9
86	4.0000	.30000	75.000	.2540-01	.2070-01	.2870-01	.3864-03	.3143-03	.4364-03	.1970	2.580	541.7
86	4.0000	.32500	76.000	.3150-01	.2560-01	.3550-01	.4781-03	.3889-03	.5470-03	.2440	3.196	540.5
86	4.0000	.35000	77.000	.2170-01	.1760-01	.2450-01	.3295-03	.2682-03	.3720-03	.1680	2.209	540.0
86	4.0000	.37500	78.000	.1570-01	.1280-01	.1770-01	.2385-03	.1941-03	.2682-03	.1220	1.601	539.3
86	4.0000	.40000	79.000	.1360-01	.1110-01	.1540-01	.1683-03	.1683-03	.2333-03	.1060	1.390	539.0
86	4.0000	.42500	80.000	.1050-01	.8500-02	.1180-01	.1590-03	.1294-03	.1794-03	.8100-01	1.070	538.8
86	4.0000	.45000	81.000	.8500-02	.6300-02	.9600-02	.1287-03	.1048-03	.1452-03	.6600-01	.8560	

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 243

OH-74 (AEDC V41B-B8A) 862C12F10H18M127E52V8R19

(RV8003)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAW	H(9T0) BTU/ R FT2SEC	H(10T0) BTU/ R FT2SEC	H(11T0) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
86	4.0000	.47500	63.000	.6700-02	.5400-02	.7500-02	.1015-03	.8263-04	.1145-03	.5200-01	.6640	538.5
86	4.0000	.50000	64.000	.5600-02	.4600-02	.6400-02	.0971-04	.6982-04	.9672-04	.4400-01	.5460	538.1
86	4.0000	.52500	65.000	.5000-02	.4100-02	.5600-02	.7581-04	.6175-04	.8955-04	.3900-01	.4830	538.3
86	4.0000	.55000	66.000	.5200-02	.4200-02	.5800-02	.7828-04	.6376-04	.8834-04	.4000-01	.4720	538.4
86	4.0000	.60000	67.000	.2700-02	.2200-02	.3000-02	.4031-04	.3284-04	.4549-04	.2100-01	.27	538.1
86	4.0000	.65000	68.000	.2000-02	.1600-02	.2300-02	.3064-04	.2496-04	.3458-04	.1600-01	.1850	538.5
86	4.0000	.70000	69.000	.2200-02	.1800-02	.2500-02	.3359-04	.2735-04	.3791-04	.1700-01	.1920	539.5
86	4.0000	.75000	70.000	.1700-02	.1400-02	.2000-02	.2650-04	.2159-04	.2991-04	.1400-01	.1520	539.0
86	4.0000	.80000	75.000	.6000-03	.5000-03	.7000-03	.9006-05	.7332-05	.1017-04	.5000-02	.5600-01	539.6
86	4.0000	.90000	78.000	.1000-03	.1000-03	.2000-03	.2247-05	.1829-05	.2537-05	.1000-02	.1500-01	540.5
86	4.0000	.92500	79.000	.6100-02	.5000-02	.6900-02	.9389-04	.7647-04	.1060-03	.4800-01	.5980	539.3
86	4.0000	.95000	80.000	.1400-02	.1100-02	.1500-02	.2075-04	.1689-04	.2343-04	.0000	.0000	583.2

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 244
(RVB003)

ORBITER FUSELAGE PORT SIDE
04-74 (AEDC W418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE
04-74 (AEDC W418-88A) B62C12F10H18H127E5V8R19

PARAMETRIC DATA

ORBITER FUSELAGE

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RNO SLUOS /FT2	MJ LB-SEC /FT2
85	7.680	39.79	80.00	1168.	166.7	2.300	87.00	.9000-02	.3930	3802.	.6714-05	.7008-07
RUN NUMBER	RN/L X10.6 /FT	HREF BTU/ R FT2SEC	STN NO R=									
85	.4480	.1511-01	.6063-01									

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	W/HREF R=0.9	W/HREF R=1.0	W/HREF R=TAN	H1(9T) BTU/ R FT2SEC	H1(0) BTU/ R FT2SEC	H1(TAN) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTHOT DEG. R /SEC	TM DEG. R
85	1.0000	.27500	1.0000	.1640-01	.1330-01	.1850-01	.2479-03	.2016-03	.2801-03	.1260	1.307	942.9
85	1.0000	.30000	2.0000	.1490-01	.1210-01	.1680-01	.2251-03	.1831-03	.2543-03	.1150	1.216	942.3
85	1.0000	.32500	3.0000	.1450-01	.1180-01	.1640-01	.2191-03	.1782-03	.2475-03	.1120	1.147	941.8
85	1.0000	.35000	4.0000	.1720-01	.1400-01	.1950-01	.2606-03	.2120-03	.2943-03	.1330	1.378	941.4
85	1.0000	.37500	5.0000	.2220-01	.1810-01	.2510-01	.3359-03	.2732-03	.3794-03	.1710	1.799	942.0
85	1.0000	.40000	6.0000	.2670-01	.2170-01	.3010-01	.4032-03	.3281-03	.4554-03	.2060	2.114	941.2
85	1.0000	.42500	7.0000	.2290-01	.1860-01	.2590-01	.3460-03	.2815-03	.3908-03	.1760	1.829	941.6
85	1.0000	.45000	8.0000	.3290-01	.2670-01	.3710-01	.4967-03	.4041-03	.5610-03	.2530	2.590	941.6
85	1.0000	.47500	9.0000	.2450-01	.2000-01	.2770-01	.3710-03	.3018-03	.4190-03	.1690	1.925	941.2
85	1.0000	.50000	10.000	.2100-01	.1710-01	.2370-01	.3168-03	.2578-03	.3577-03	.2010	2.039	941.1
85	1.0000	.52500	11.000	.2610-01	.2120-01	.2950-01	.3943-03	.3208-03	.4453-03	.1570	1.980	941.1
85	1.0000	.55000	12.000	.2040-01	.1660-01	.2300-01	.3081-03	.2507-03	.3480-03	.1240	1.295	941.1
85	1.0000	.57500	13.000	.1610-01	.1310-01	.1810-01	.2426-03	.1817-03	.2522-03	.1140	1.155	941.1
85	1.0000	.60000	14.000	.1480-01	.1200-01	.1670-01	.2233-03	.1126-03	.1562-03	.7100-01	.8900	941.1
85	1.0000	.70000	15.000	.9200-02	.7400-02	.1030-01	.1383-03	.1126-03	.1562-03	.4900-01	.4950	941.0
85	1.0000	.75000	16.000	.8300-02	.6200-02	.7100-02	.9566-04	.1022-04	.1418-04	.6000-02	.6200-01	940.8
85	1.0000	.80000	17.000	.8000-03	.7000-03	.9000-03	.1258-04	.1022-04	.1418-04	.4900-02	.6200-01	940.8
85	1.0000	.85000	18.000	.1880-01	.1530-01	.2120-01	.2839-03	.2308-03	.3278-03	.1440	1.691	943.4
85	2.0000	.28500	19.000	.2440-01	.1990-01	.2760-01	.3693-03	.3004-03	.4172-03	.1880	2.217	942.3
85	2.0000	.33700	20.000	.2990-01	.2430-01	.3380-01	.4523-03	.3679-03	.5108-03	.2300	2.720	941.7
85	2.0000	.39000	21.000	.3120-01	.2540-01	.3520-01	.4713-03	.3834-03	.5323-03	.2400	2.818	941.8
85	2.0000	.42600	22.000	.1970-01	.1600-01	.2220-01	.2977-03	.2422-03	.3362-03	.1520	1.694	941.1

DATE 07 OCT 75

04-74 (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 245

04-74 (AEDC V418-88A) B8EC12F10H16M127E52V0819

(R48003)

RUN NUMBER	TRAJ.E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAM	H(9TO) BTU/ R F12SEC	H(10) BTU/ R F12SEC	H(TAM) BTU/ R F12SEC	QDOT BTU/ F12SEC	DTMDY DEG. R /SEC	TM DEG. R
85	2.0000	.53000	23.000	.1650-01	.1340-01	.1680-01	.2494-03	.2029-03	.2816-03	.1270	540.8	540.8
85	2.0000	.56700	24.000	.1190-01	.9700-02	.1340-01	.1793-03	.1459-03	.2024-03	.9200-01	.9960	540.7
85	2.0000	.62000	25.000	.9700-02	.7900-02	.1100-01	.1473-03	.1199-03	.1683-03	.7500-01	.8190	540.6
85	2.0000	.67000	26.000	.9700-02	.7900-02	.1090-01	.1465-03	.1192-03	.1683-03	.7500-01	.8150	539.9
85	2.0000	.70500	27.000	.8400-02	.6900-02	.9500-02	.1266-03	.1031-03	.1430-03	.6500-01	.6980	539.9
85	2.0000	.75000	28.000	.3100-02	.2600-02	.3500-02	.4748-04	.3865-04	.5361-04	.2400-01	.2670	539.9
85	2.0000	.80000	29.000	.1400-02	.1100-02	.1600-02	.2097-04	.1707-04	.2367-04	.1100-01	.1180	540.2
85	2.0000	.82400	30.000	.0000	.0000	.0000	.2735-06	.2226-06	.3088-06	.0000	.2000-02	540.4
85	2.0000	.20000	31.000	.3510-01	.2850-01	.3970-01	.5311-03	.4312-03	.6006-03	.2680	2.837	547.0
85	3.0000	.22500	32.000	.2940-01	.2390-01	.3320-01	.4444-03	.3609-03	.5025-03	.2240	2.510	546.1
85	3.0000	.25000	33.000	.2380-01	.1930-01	.2690-01	.3596-03	.2922-03	.4064-03	.1820	2.038	544.8
85	3.0000	.27500	34.000	.1910-01	.1560-01	.2160-01	.2893-03	.2351-03	.3269-03	.1470	1.758	543.8
85	3.0000	.30000	35.000	.1940-01	.1580-01	.2200-01	.2938-03	.2389-03	.3319-03	.1490	1.849	542.9
85	3.0000	.32500	36.000	.2960-01	.2410-01	.3350-01	.4477-03	.3641-03	.5058-03	.2280	2.673	542.4
85	3.0000	.35000	37.000	.3450-01	.2800-01	.3900-01	.5212-03	.4239-03	.5888-03	.2650	3.081	542.3
85	3.0000	.37500	38.000	.2640-01	.2150-01	.2590-01	.3996-03	.3251-03	.4513-03	.2040	2.392	541.4
85	3.0000	.42500	40.000	.2110-01	.1720-01	.2380-01	.3185-03	.2592-03	.3597-03	.1630	1.919	540.8
85	3.0000	.45000	41.000	.1660-01	.1350-01	.1870-01	.3192-03	.2598-03	.3605-03	.1630	1.465	540.2
85	3.0000	.47500	42.000	.1440-01	.1170-01	.1620-01	.2174-03	.1770-03	.2455-03	.1280	1.240	540.1
85	3.0000	.50000	43.000	.1350-01	.1100-01	.1520-01	.2039-03	.1660-03	.2301-03	.1040	1.164	539.9
85	3.0000	.52500	44.000	.9600-02	.7800-02	.1080-01	.1446-03	.1177-03	.1632-03	.7400-01	.8690	539.6
85	3.0000	.55000	45.000	.8700-02	.7100-02	.9800-02	.1312-03	.1068-03	.1481-03	.6700-01	.7490	539.5
85	3.0000	.60000	46.000	.6800-02	.5500-02	.7600-02	.1021-03	.8311-04	.1152-03	.5200-01	.5690	539.4
85	3.0000	.65000	47.000	.4500-02	.3700-02	.5100-02	.6841-04	.5570-04	.7722-04	.3500-01	.3720	539.4
85	3.0000	.70000	48.000	.3200-02	.2600-02	.3600-02	.4802-04	.3910-04	.5420-04	.2500-01	.2720	539.3
85	3.0000	.75000	49.000	.5000-03	.4000-03	.6000-03	.7920-05	.6447-05	.8941-05	.4000-02	.4300-01	539.8
85	3.0000	.80000	50.000	.2200-02	.1800-02	.2400-02	.3256-04	.2650-04	.3676-04	.1700-01	.2060	540.2
85	3.0000	.85000	51.000	.6000-03	.5000-03	.7000-03	.9167-05	.7459-05	.1035-04	.5000-02	.5800-01	541.0
85	3.0000	.87500	52.000	.1000-03	.1000-03	.1000-03	.1827-05	.1486-05	.2063-05	.1000-02	.1300-01	541.2
85	3.0000	.90000	53.000	.8000-03	.6000-03	.9000-03	.1166-04	.9488-05	.1317-04	.6000-02	.7800-01	541.2
85	3.0000	.92500	54.000	.5000-03	.4000-03	.5000-03	.7122-05	.5798-05	.8042-05	.4000-02	.3700-01	540.8
85	3.0000	.95000	55.000	.4080-01	.3310-01	.4620-01	.6171-03	.5007-03	.6983-03	.3100	2.534	548.8
85	4.0000	.20000	71.000	.3040-01	.2470-01	.3440-01	.4595-03	.3731-03	.5197-03	.2320	2.714	546.7
85	4.0000	.22500	72.000	.2850-01	.2320-01	.3230-01	.4311-03	.3502-03	.4874-03	.2180	2.554	545.5
85	4.0000	.25000	73.000	.3060-01	.2440-01	.3190-01	.4263-03	.3464-03	.4818-03	.2160	2.673	544.4
85	4.0000	.27500	74.000	.2820-01	.2290-01	.3390-01	.4532-03	.3684-03	.5131-03	.2300	3.014	543.8
85	4.0000	.30000	75.000	.3060-01	.2440-01	.3390-01	.4532-03	.3684-03	.5131-03	.2300	3.014	543.8
85	4.0000	.32500	57.000	.2640-01	.2150-01	.2980-01	.3991-03	.3245-03	.4509-03	.2030	2.660	542.8
85	4.0000	.35000	58.000	.2020-01	.1640-01	.2280-01	.3051-03	.2482-03	.3446-03	.1550	2.040	541.6
85	4.0000	.37500	59.000	.2020-01	.1640-01	.2280-01	.3051-03	.2482-03	.3446-03	.1550	2.040	541.6
85	4.0000	.40000	60.000	.1240-01	.1010-01	.1760-01	.2354-03	.1916-03	.2659-03	.1200	1.577	540.9
85	4.0000	.42500	61.000	.9700-02	.7900-02	.1100-01	.1470-03	.1197-03	.1660-03	.7500-01	.9870	539.9

DATE 07 OCT 75

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 246

04-74 (AEDC V41B-88A) 862C12F10M16M127E32V8R19

(RVB003)

RUN NUMBER	TIME	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAM	H1G10 BTU/R FT2SEC	H1T01 BTU/R FT2SEC	H1TAM BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTNOT DEG. R /SEC	TH DEG. R
85	4.0000	.45000	62.000	.7200-02	.5800-02	.8100-02	.1083-03	.6917-04	.1222-03	.5500-01	.7200	539.4
85	4.0000	.47500	63.000	.5500-02	.4500-02	.6200-02	.6267-04	.6748-04	.9353-04	.4200-01	.5420	539.0
85	4.0000	.50000	64.000	.5200-02	.4200-02	.5800-02	.7796-04	.6348-04	.8798-04	.4000-01	.4980	538.9
85	4.0000	.52500	65.000	.4900-02	.4000-02	.5500-02	.7378-04	.6009-04	.8328-04	.3800-01	.4690	538.9
85	4.0000	.55000	66.000	.4700-02	.3800-02	.5300-02	.7104-04	.5785-04	.8818-04	.3600-01	.4280	538.9
85	4.0000	.60000	67.000	.2200-02	.1800-02	.2500-02	.3376-04	.2749-04	.3810-04	.1700-01	.1950	538.7
85	4.0000	.65000	68.000	.1900-02	.1500-02	.2100-02	.2800-04	.2280-04	.3160-04	.1400-01	.1690	538.8
85	4.0000	.75000	70.000	.1300-02	.1000-02	.1400-02	.1910-04	.1555-04	.2196-04	.1000-01	.1090	539.6
85	4.0000	.85000	76.000	.1000-03	.0000	.1000-03	.8765-06	.7133-06	.9896-06	.0000	.5000-02	540.5
85	4.0000	.87500	77.000	.5000-03	.4000-03	.6000-03	.8153-05	.6837-05	.9204-05	.4000-02	.5500-01	540.3
85	4.0000	.90000	78.000	.1000-03	.1000-03	.2000-03	.2247-05	.1829-05	.2537-05	.1000-02	.1500-01	540.5
85	4.0000	.92500	79.000	.6100-02	.5000-02	.6900-02	.9389-04	.7647-04	.1080-03	.4800-01	.5980	539.3
85	4.0000	.95000	80.000	.5700-02	.4600-02	.6400-02	.8739-04	.7116-04	.9864-04	.4500-01	.5270	540.0

DATE 07 OCT 75

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 247

04-74 (AEDC V418-B8A) B62C12F10M16H127E52V8R19

(RV8003)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
38	7.960	29.83	299.3	1269.	-90.02	2.000	92.80	.3230-01	1.405	3759.	.2863-04	.7473-07

RUN NUMBER	RW/L X10 ⁶ /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175
38	1.440	.2899-01	.3375-01

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAM	H18701 BTU/ R FT ² SEC	H1701 BTU/ R FT ² SEC	H17A1 BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	OTMDT DEG. R /SEC	TH DEG. R
38	1.0000	.27500	1.0000	.1580-01	.1310-01	.1770-01	.4586-03	.3787-03	.5127-03	.2760	2.862	540.8
38	1.0000	.30000	2.0000	.1360-01	.1120-01	.1520-01	.3938-03	.3252-03	.4402-03	.2370	2.518	540.4
38	1.0000	.32500	3.0000	.1250-01	.1030-01	.1390-01	.3615-03	.2986-03	.4040-03	.2180	2.241	539.6
38	1.0000	.35000	4.0000	.1410-01	.1170-01	.1580-01	.4089-03	.3378-03	.4571-03	.2460	2.559	539.6
38	1.0000	.37500	5.0000	.1090-01	.9000-02	.1220-01	.3155-03	.2606-03	.3527-03	.1900	2.001	540.0
38	1.0000	.40000	6.0000	.1860-01	.1530-01	.2080-01	.5381-03	.4443-03	.6015-03	.3240	3.329	540.5
38	1.0000	.42500	7.0000	.2030-01	.1680-01	.2270-01	.5893-03	.4865-03	.6589-03	.3540	3.673	541.4
38	1.0000	.45000	8.0000	.2450-01	.2020-01	.2740-01	.7099-03	.5862-03	.7937-03	.4270	4.367	541.1
38	1.0000	.47500	9.0000	.2260-01	.1860-01	.2520-01	.6543-03	.5401-03	.7316-03	.3930	4.001	541.8
38	1.0000	.50000	10.000	.2940-01	.2430-01	.3230-01	.8627-03	.7039-03	.9535-03	.5120	5.189	541.9
38	1.0000	.52500	11.000	.3970-01	.3280-01	.4450-01	.1152-02	.9506-03	.1289-02	.5900	6.985	543.5
38	1.0000	.55000	12.000	.4170-01	.3440-01	.4660-01	.1208-02	.9969-03	.1351-02	.7230	7.259	543.5
38	1.0000	.60000	13.000	.4020-01	.3320-01	.4500-01	.1155-02	.9609-03	.1303-02	.6960	7.046	544.7
38	1.0000	.65000	14.000	.2420-01	.2000-01	.2710-01	.7014-03	.5791-03	.7843-03	.4210	4.272	541.5
38	1.0000	.70000	15.000	.1950-01	.1610-01	.2180-01	.5642-03	.4658-03	.6309-03	.3390	3.314	541.6
38	1.0000	.75000	16.000	.1480-01	.1230-01	.1660-01	.4301-03	.3952-03	.4808-03	.2590	2.626	540.3
38	1.0000	.80000	17.000	.1060-01	.8800-02	.1190-01	.3077-03	.2538-03	.3436-03	.1850	1.792	541.1
38	1.0000	.85000	18.000	.1680-01	.1390-01	.1880-01	.4883-03	.4032-03	.5459-03	.2940	3.448	540.8
38	2.0000	.33700	19.000	.1300-01	.1320-01	.1790-01	.4645-03	.3836-03	.5192-03	.2800	3.303	540.1
38	2.0000	.39000	20.000	.2850-01	.2360-01	.3190-01	.8268-03	.6826-03	.9245-03	.4970	5.863	541.4
38	2.0000	.42600	21.000	.3610-01	.2980-01	.4030-01	.1045-02	.8825-03	.1169-02	.6260	7.336	543.7
38	2.0000	.47800	22.000	.5570-01	.4590-01	.6230-01	.1615-02	.1332-02	.1807-02	.9510	10.74	544.9

DATE 07 OCT 75

04-7N (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 248

04-7N (AEDC V418-B8A) B8C12F10H18H17E52V0R19

(RV8003)

RNA NUMBER	TRAFF	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H18T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
38	2.0000	.53000	23.000	.3300-01	.2720-01	.3690-01	.9566-03	.7693-03	.1070-02	.5730	6.363	543.2
38	2.0000	.56700	24.000	.2310-01	.1910-01	.2590-01	.6702-03	.5533-03	.7493-03	.4030	4.382	541.2
38	2.0000	.62000	25.000	.1520-01	.1260-01	.1700-01	.4416-03	.3846-03	.4038-03	.2880	2.891	540.6
38	2.0000	.67000	26.000	.1110-01	.0920-02	.1240-01	.3226-03	.2665-03	.3605-03	.1950	2.119	539.0
38	2.0000	.70500	27.000	.9300-02	.7700-02	.1040-01	.2698-03	.2229-03	.3015-03	.1630	1.756	539.0
38	2.0000	.75000	28.000	.8100-02	.6700-02	.9000-02	.2334-03	.1928-03	.2608-03	.1410	1.549	539.0
38	2.0000	.80000	29.000	.5600-02	.4600-02	.6300-02	.1629-03	.1346-03	.1821-03	.9800-01	1.087	538.8
38	2.0000	.82400	30.000	.9000-03	.7000-03	.1000-02	.2472-04	.2043-04	.2782-04	.1500-01	.2080	538.6
38	3.0000	.20000	31.000	.3410-01	.2610-01	.3920-01	.9886-03	.8146-03	.1107-02	.5870	6.216	548.2
38	3.0000	.22500	32.000	.2960-01	.2440-01	.3320-01	.6593-03	.7085-03	.9617-03	.8120	5.727	546.1
38	3.0000	.25000	33.000	.2270-01	.1880-01	.2940-01	.6593-03	.7085-03	.9617-03	.8120	5.727	546.1
38	3.0000	.27500	34.000	.1790-01	.1480-01	.2010-01	.5201-03	.4294-03	.5815-03	.3130	3.748	541.2
38	3.0000	.30000	35.000	.1620-01	.1340-01	.1810-01	.4704-03	.3885-03	.5259-03	.2830	3.512	540.1
38	3.0000	.32500	36.000	.1690-01	.1390-01	.1880-01	.4885-03	.4035-03	.5460-03	.2940	3.458	539.7
38	3.0000	.35000	37.000	.2500-01	.2060-01	.2790-01	.7242-03	.5981-03	.8096-03	.4360	5.065	540.5
38	3.0000	.37500	38.000	.3700-01	.3050-01	.4130-01	.1071-02	.8840-03	.1198-02	.6420	7.537	542.5
38	3.0000	.40000	39.000	.4390-01	.3620-01	.4910-01	.1271-02	.1049-02	.1422-02	.7620	8.994	542.5
38	3.0000	.42500	40.000	.4460-01	.3680-01	.4990-01	.1294-02	.1067-02	.1447-02	.7740	9.169	544.0
38	3.0000	.45000	41.000	.4490-01	.3710-01	.5030-01	.1302-02	.1075-02	.1457-02	.7810	8.924	542.8
38	3.0000	.47500	42.000	.3330-01	.2750-01	.3730-01	.9655-03	.7977-03	.1081-02	.5800	6.462	542.4
38	3.0000	.50000	43.000	.2400-01	.1980-01	.2680-01	.6954-03	.5742-03	.7775-03	.4180	4.665	540.8
38	3.0000	.52500	44.000	.1620-01	.1340-01	.1810-01	.4699-03	.3881-03	.5252-03	.2830	3.325	539.9
38	3.0000	.55000	45.000	.1340-01	.1110-01	.1500-01	.3696-03	.3218-03	.4354-03	.2350	2.621	539.5
38	3.0000	.57500	46.000	.9600-02	.7900-02	.1070-01	.2778-03	.2295-03	.3105-03	.1680	1.825	539.0
38	3.0000	.60000	47.000	.6700-02	.5500-02	.7500-02	.1946-03	.1608-03	.2175-03	.1170	1.250	538.5
38	3.0000	.62500	48.000	.4700-02	.3900-02	.5200-02	.1351-03	.1116-03	.1509-03	.8200-01	.9010	538.7
38	3.0000	.65000	49.000	.3200-02	.2600-02	.3500-02	.9181-04	.7587-04	.1026-03	.9500-01	.6040	538.2
38	3.0000	.67500	50.000	.1400-02	.1200-02	.1600-02	.4075-04	.3368-04	.4554-04	.2500-01	.2650	536.0
38	3.0000	.70000	51.000	.4000-02	.3300-02	.4500-02	.1164-03	.9609-04	.1301-03	.7000-01	.8670	541.2
38	3.0000	.72500	52.000	.4100-02	.3400-02	.4600-02	.1184-03	.9776-04	.1324-03	.7100-01	.9920	541.5
38	3.0000	.75000	53.000	.2500-02	.2100-02	.2800-02	.7372-04	.6086-04	.8243-04	.4400-01	.5810	541.5
38	3.0000	.77500	54.000	.2200-02	.1800-02	.2500-02	.6433-04	.5129-04	.7214-04	.3900-01	.3940	540.5
38	3.0000	.80000	55.000	.4040-01	.3330-01	.4530-01	.1172-02	.9645-03	.1313-02	.6910	7.865	552.3
38	4.0000	.20000	71.000	.3150-01	.2590-01	.3520-01	.9120-03	.7514-03	.1021-02	.5420	6.338	548.1
38	4.0000	.22500	72.000	.2450-01	.2020-01	.2750-01	.7114-03	.5867-03	.7960-03	.4250	4.978	545.0
38	4.0000	.25000	73.000	.2340-01	.1930-01	.2610-01	.6768-03	.5584-03	.7572-03	.4050	5.012	543.9
38	4.0000	.27500	74.000	.2110-01	.1740-01	.2380-01	.6111-03	.5044-03	.6834-03	.3670	4.808	542.3
38	4.0000	.30000	75.000	.4090-01	.3370-01	.4580-01	.1186-02	.9780-03	.1377-02	.7080	9.282	544.5
38	4.0000	.32500	76.000	.5270-01	.4340-01	.5900-01	.1527-02	.1258-02	.1709-02	.9080	11.88	547.5
38	4.0000	.35000	77.000	.3530-01	.2920-01	.3950-01	.1025-02	.8455-03	.1146-02	.6140	8.051	542.8
38	4.0000	.37500	78.000	.2230-01	.1840-01	.2490-01	.6460-03	.5334-03	.7223-03	.3880	5.093	541.3
38	4.0000	.40000	60.000	.1580-01	.1310-01	.1770-01	.4568-03	.3789-03	.5129-03	.2760	3.626	540.3
38	4.0000	.42500	61.000	.1150-01	.9500-02	.1290-01	.3341-03	.2760-03	.3734-03	.2010	2.614	539.4

DATE 07 OCT 76

04-74 (AEDC W-18-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 249

04-74 (AEDC W-18-B8A) SPECIFIC HEAT DATA

(IN 8003)

RUN NUMBER	TRAPE	X/L	T/C NO	W/REF R=0.9	H/REF R=1.0	W/REF R=1.0	H/REF R=1.0	H(10) BTU/R	F(10) FT/SEC	H(10) BTU/R	F(10) FT/SEC	H(10) BTU/R	F(10) FT/SEC	QDOT BTU/SEC	DTHOT DEG. R	TH DEG. R
38	4.0000	.47500	63.000	.8700-02	.7200-02	.8700-02	.2512-03	.2075-03	.2908-03	.2908-03	.2908-03	.2908-03	.2908-03	.1910	1.831	939.6
38	4.0000	.50000	64.000	.7100-02	.5800-02	.8000-02	.2065-03	.1706-03	.2308-03	.2308-03	.2308-03	.2308-03	.2308-03	.1250	1.547	938.5
38	4.0000	.52500	65.000	.5400-02	.4500-02	.8100-02	.1578-03	.1304-03	.1784-03	.1784-03	.1784-03	.1784-03	.1784-03	.9000-01	1.183	938.4
38	4.0000	.55000	66.000	.5200-02	.4300-02	.5800-02	.1495-03	.1235-03	.1676-03	.1676-03	.1676-03	.1676-03	.1676-03	.9000-01	1.062	937.9
38	4.0000	.60000	67.000	.3500-02	.2500-02	.3900-02	.1018-03	.8414-04	.1137-03	.1137-03	.1137-03	.1137-03	.1137-03	.8200-01	.6950	937.6
38	4.0000	.65000	68.000	.3100-02	.2500-02	.3400-02	.8861-04	.7323-04	.8901-04	.8901-04	.8901-04	.8901-04	.8901-04	.8400-01	.8300	937.8
38	4.0000	.70000	69.000	.1800-02	.1500-02	.2000-02	.5209-04	.4305-04	.5820-04	.5820-04	.5820-04	.5820-04	.5820-04	.3100-01	.3520	938.0
38	4.0000	.75000	70.000	.1100-02	.9000-03	.1200-02	.3206-04	.2650-04	.3582-04	.3582-04	.3582-04	.3582-04	.3582-04	.1900-01	.2170	937.3
38	4.0000	.80000	75.000	.5000-03	.4000-03	.5000-03	.1373-04	.1134-04	.1534-04	.1534-04	.1534-04	.1534-04	.1534-04	.8000-02	.1000+00	938.1
38	4.0000	.85000	76.000	.3900-02	.3100-02	.4200-02	.1095-03	.9050-04	.1223-03	.1223-03	.1223-03	.1223-03	.1223-03	.6600-01	.7870	937.7
38	4.0000	.87500	77.000	.1400-02	.1100-02	.1500-02	.3978-04	.3287-04	.4445-04	.4445-04	.4445-04	.4445-04	.4445-04	.2400-01	.3160	938.5
38	4.0000	.90000	78.000	.1600-02	.1400-02	.1800-02	.4759-04	.3932-04	.5319-04	.5319-04	.5319-04	.5319-04	.5319-04	.2900-01	.3730	939.1
38	4.0000	.92500	79.000	.5000-02	.4100-02	.5600-02	.1441-03	.1190-03	.1610-03	.1610-03	.1610-03	.1610-03	.1610-03	.8700-01	1.077	939.4
38	4.0000	.95000	80.000	.4100-02	.3400-02	.4600-02	.1184-03	.9865-04	.1335-03	.1335-03	.1335-03	.1335-03	.1335-03	.7200-01	.8450	940.2

(RVB0003)

04-74 (AEDC W4B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PARAMETRIC DATA

BETA = 2.000 MACH = 9.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RU-0 SLURS /FT2	MU LB-SEC /FT2
39	7.860	39.84	298.7	1269.	166.7	2.300	92.40	3200-01	1.402	3758.	.2857-04	.7473-07

RUN NUMBER	RV/L X10.6	HREF BTU/ R	STN NO R=
39	1.437	.0175	.3378-01

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	M/HREF R=0.9	M/HREF R=1.0	M/HREF R-T/W	H18T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
39	1.0000	.27500	1.0000	.1620-01	.1340-01	.1810-01	.4685-03	.3857-03	.5239-03	.2810	2.914	542.4
39	1.0000	.30000	2.0000	.1560-01	.1290-01	.1750-01	.4523-03	.3733-03	.5057-03	.2710	2.883	541.8
39	1.0000	.32500	3.0000	.1330-01	.1100-01	.1480-01	.3942-03	.3172-03	.4295-03	.2310	2.375	540.9
39	1.0000	.35000	4.0000	.1650-01	.1530-01	.2070-01	.5360-03	.4426-03	.5933-03	.3220	3.342	541.3
39	1.0000	.37500	5.0000	.2220-01	.1830-01	.2460-01	.6421-03	.5299-03	.7181-03	.3850	4.049	542.5
39	1.0000	.40000	6.0000	.2490-01	.2060-01	.2790-01	.7221-03	.5961-03	.8074-03	.4330	4.455	541.8
39	1.0000	.42500	7.0000	.1980-01	.1630-01	.2210-01	.5719-03	.4721-03	.6395-03	.3430	3.561	541.9
39	1.0000	.45000	8.0000	.3200-01	.2640-01	.3580-01	.9288-03	.7649-03	.1037-02	.9560	5.683	542.6
39	1.0000	.47500	9.0000	.3070-01	.2530-01	.3430-01	.8885-03	.7331-03	.9938-03	.5320	5.415	543.2
39	1.0000	.50000	10.000	.2510-01	.2070-01	.2810-01	.7288-03	.5959-03	.8127-03	.4360	4.422	541.8
39	1.0000	.52500	11.000	.3500-01	.2970-01	.4020-01	.1042-02	.8594-03	.1165-02	.6240	6.319	543.2
39	1.0000	.55000	12.000	.3160-01	.2610-01	.3540-01	.9154-03	.7595-03	.1024-02	.5490	5.511	542.6
39	1.0000	.57500	13.000	.2780-01	.2280-01	.3090-01	.7994-03	.6597-03	.8941-03	.4790	4.855	542.8
39	1.0000	.60000	14.000	.2550-01	.2100-01	.2850-01	.7371-03	.6084-03	.8243-03	.4420	4.483	542.1
39	1.0000	.62500	15.000	.5600-02	.7900-02	.1070-01	.2777-03	.2283-03	.3105-03	.1670	1.635	540.6
39	1.0000	.70000	16.000	.4200-02	.3400-02	.4700-02	.1207-03	.9972-04	.1349-03	.7300-01	.7390	539.3
39	1.0000	.75000	17.000	.1100-02	.9000-03	.1300-02	.3299-04	.2726-04	.3687-04	.2000-01	.1930	539.0
39	1.0000	.80000	18.000	.1770-01	.1460-01	.1990-01	.5118-03	.4223-03	.5774-03	.3070	3.596	543.1
39	2.0000	.26500	19.000	.2110-01	.1740-01	.2360-01	.6118-03	.5048-03	.6843-03	.3570	4.326	542.7
39	2.0000	.33700	20.000	.2860-01	.2360-01	.3200-01	.8265-03	.6836-03	.9267-03	.4950	5.951	543.2
39	2.0000	.39000	21.000	.3840-01	.3170-01	.4300-01	.1112-02	.9170-03	.1244-02	.6640	7.779	545.2
39	2.0000	.42600	22.000	.2950-01	.2440-01	.3300-01	.8555-03	.7060-03	.9668-03	.5130	5.714	542.9
39	2.0000	.47800	23.000									

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75			OH-7A (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE										PAGE 252	
			OH-7A (AEDC V418-B8A) B62C12F10M18H127E52V8R19										(RV8003)	
RUN NUMBER	TRAXE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=1.1	H19TO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	QDOT DEC. R /SEC	TM DEC. R		
39	4.0000	.45000	62.000	.6000-02	.6600-02	.6900-02	.2304-03	.1903-03	.2575-03	.1390	1.802	539.6		
39	4.0000	.47500	63.000	.6400-02	.5300-02	.7200-02	.1858-03	.1535-03	.2076-03	.1120	1.430	539.0		
39	4.0000	.50000	64.000	.4900-02	.4100-02	.5500-02	.1428-03	.1180-03	.1598-03	.8600-01	1.070	538.5		
39	4.0000	.52500	65.000	.4400-02	.3600-02	.4900-02	.1264-03	.1044-03	.1412-03	.7600-01	.9470	538.5		
39	4.0000	.55000	66.000	.3400-02	.2800-02	.3900-02	.9885-04	.8252-04	.1118-03	.6000-01	.7090	538.3		
39	4.0000	.60000	67.000	.2000-02	.1700-02	.J-02	.5885-04	.4848-04	.6553-04	.3500-01	.4000	537.5		
39	4.0000	.65000	68.000	.8000-03	.6000-03	.9100-03	.2233-04	.1848-04	.2435-04	.1400-01	.1590	537.5		
39	4.0000	.70000	69.000	.1300-02	.1100-02	.1500-02	.3795-04	.3136-04	.4241-04	.2300-01	.2560	538.0		
39	4.0000	.75000	70.000	.5000-03	.4000-03	.5000-03	.1319-04	.1090-04	.1473-04	.8000-02	.8900-01	537.9		
39	4.0000	.80000	75.000	.7000-03	.5000-03	.7000-03	.1895-04	.1586-04	.2118-04	.1100-01	.1380	538.9		
39	4.0000	.85000	76.000	.1900-02	.1600-02	.2100-02	.5456-04	.4510-04	.6096-04	.3300-01	.3920	537.5		
39	4.0000	.87500	77.000	.8000-03	.7000-03	.9000-03	.2430-04	.2008-04	.2715-04	.1500-01	.1930	534.6		
39	4.0000	.90000	78.000	.1000-02	.8000-03	.1100-02	.2816-04	.2327-04	.3148-04	.1700-01	.2210	539.1		
39	4.0000	.92500	79.000	.2200-02	.1800-02	.2400-02	.6330-04	.5229-04	.7074-04	.3800-01	.4730	539.3		
39	4.0000	.75000	80.000	.2600-02	.2100-02	.2900-02	.7423-04	.6132-04	.8297-04	.4500-01	.5250	539.7		

(RV8003)

04-74 (AEDC W41B-98A) BSEC12F10H16H127E9V0R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUOS /FT3	MU LB-SEC /FT2
50	7.980	29.83	419.2	1290.	-90.06	2.100	93.90	.4400-01	1.945	3789.	.3899-04	.7581-07

RUN NUMBER	RV/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175
50	1.954	.3421-01	.2897-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
50	1.0000	.27500	1.0000	.1690-01	.1400-01	.1880-01	.5772-03	.4774-03	.6445-03	.3560	3.693	543.6
50	1.0000	.30000	2.0000	.1410-01	.1170-01	.1580-01	.4834-03	.3999-03	.5397-03	.2990	3.170	543.1
50	1.0000	.32500	3.0000	.1330-01	.1100-01	.1480-01	.4546-03	.3762-03	.5075-03	.2810	2.890	542.3
50	1.0000	.35000	4.0000	.1410-01	.1170-01	.1580-01	.4836-03	.4002-03	.5399-03	.2990	3.103	542.3
50	1.0000	.37500	5.0000	.1180-01	.9700-02	.1310-01	.4025-03	.3330-03	.4494-03	.2490	2.618	542.6
50	1.0000	.40000	6.0000	.1920-01	.1590-01	.2140-01	.6567-03	.5432-03	.7332-03	.4060	4.167	543.2
50	1.0000	.42500	7.0000	.1970-01	.1630-01	.2200-01	.6750-03	.5583-03	.7538-03	.4160	4.316	544.0
50	1.0000	.45000	8.0000	.2350-01	.1950-01	.2630-01	.8051-03	.6859-03	.8991-03	.4970	5.076	544.1
50	1.0000	.47500	9.0000	.2120-01	.1750-01	.2360-01	.7238-03	.5986-03	.8083-03	.4460	4.540	544.3
50	1.0000	.50000	10.000	.2500-01	.2070-01	.2800-01	.8563-03	.7082-03	.9564-03	.5280	5.345	544.5
50	1.0000	.52500	11.000	.3360-01	.2780-01	.3760-01	.1151-02	.9513-03	.1286-02	.7080	7.159	546.1
50	1.0000	.55000	12.000	.3760-01	.3110-01	.4210-01	.1288-02	.1064-02	.1438-02	.7910	7.932	546.4
50	1.0000	.60000	13.000	.5230-01	.4320-01	.5850-01	.1790-02	.1478-02	.2001-02	1.094	11.05	549.7
50	1.0000	.65000	14.000	.3060-01	.2530-01	.3420-01	.1046-02	.8847-03	.1168-02	.6440	6.515	545.5
50	1.0000	.70000	15.000	.2570-01	.2120-01	.2870-01	.8784-03	.7263-03	.9811-03	.5410	5.285	545.0
50	1.0000	.75000	16.000	.1850-01	.1530-01	.2070-01	.6341-03	.5245-03	.7080-03	.3910	3.965	543.6
50	1.0000	.80000	17.000	.1290-01	.1070-01	.1440-01	.3652-03	.3652-03	.4930-03	.2730	2.642	543.5
50	1.0000	.85000	18.000	.1680-01	.1390-01	.1880-01	.5747-03	.4754-03	.6477-03	.3550	4.163	543.4
50	2.0000	.28500	19.000	.1630-01	.1350-01	.1820-01	.5583-03	.4619-03	.6233-03	.3450	4.072	542.8
50	2.0000	.33700	20.000	.2810-01	.2320-01	.3140-01	.9614-03	.7950-03	.1074-02	.5920	6.979	544.9
50	2.0000	.39000	21.000	.3380-01	.2800-01	.3780-01	.1158-02	.9570-03	.1294-02	.7120	8.334	546.4
50	2.0000	.42600	22.000	.5140-01	.4240-01	.5740-01	.1758-02	.1452-02	.1965-02	1.077	11.97	548.4

DATE 07 OCT 75

OH-7A (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 25A

(RV8003)

OH-7A (AEDC V418-88A) 862C12F10M18N127E52V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAM	H(9T0) BTU/R FT ² SEC	H(10) BTU/R FT ² SEC	H(14H) BTU/R FT ² SEC	QDOT BTU/ FT ² SEC	OTDOT DEG. R /SEC	TM DEG. R
50	2.0000	.53000	23.000	.4630-01	.3820-01	.5170-01	.1593-02	.1308-02	.1769-02	.9700	10.78	548.5
50	2.0000	.56700	24.000	.3230-01	.2670-01	.3610-01	.1106-02	.9145-03	.1236-02	.6800	7.387	548.0
50	2.0000	.62000	25.000	.1930-01	.1600-01	.2160-01	.6605-03	.5464-03	.7375-03	.4080	4.433	543.5
50	2.0000	.67000	26.000	.1290-01	.1060-01	.1440-01	.4398-03	.3638-03	.4911-03	.2720	2.954	543.2
50	2.0000	.70500	27.000	.1080-01	.0900-02	.1200-01	.3684-03	.3048-03	.4112-03	.2280	2.456	542.1
50	2.0000	.75000	28.000	.9400-02	.7800-02	.1050-01	.3214-03	.2680-03	.3587-03	.1980	2.188	541.4
50	2.0000	.80000	29.000	.7200-02	.6000-02	.8100-02	.2469-03	.2044-03	.2756-03	.1530	1.890	541.4
50	2.0000	.82400	30.000	.1200-02	.1000-02	.1300-02	.4080-04	.3361-04	.4531-04	.2500-01	.2510	540.9
50	3.0000	.20000	31.000	.3490-01	.2880-01	.3900-01	.1192-02	.9837-03	.1334-02	.7250	7.681	552.7
50	3.0000	.22500	32.000	.2990-01	.2470-01	.3340-01	.1233-02	.6447-03	.1144-02	.6250	6.974	550.2
50	3.0000	.25000	33.000	.2270-01	.1880-01	.2540-01	.7780-03	.6430-03	.8693-03	.4780	5.346	548.5
50	3.0000	.27500	34.000	.1830-01	.1510-01	.2040-01	.6255-03	.5173-03	.6965-03	.3880	4.821	544.1
50	3.0000	.30000	35.000	.1680-01	.1370-01	.1850-01	.5676-03	.4686-03	.6337-03	.3510	4.346	542.8
50	3.0000	.32500	36.000	.1690-01	.1400-01	.1880-01	.5774-03	.4778-03	.6446-03	.3570	4.193	542.3
50	3.0000	.35000	37.000	.2520-01	.2080-01	.2810-01	.8621-03	.7130-03	.9628-03	.5370	6.172	544.0
50	3.0000	.37500	38.000	.3610-01	.2980-01	.4030-01	.1233-02	.1020-02	.1378-02	.7580	8.698	545.3
50	3.0000	.40000	39.000	.4320-01	.3570-01	.4830-01	.1478-02	.1222-02	.1651-02	.9090	10.70	546.1
50	3.0000	.42500	40.000	.4490-01	.3710-01	.5020-01	.1535-02	.1268-02	.1716-02	.9400	11.12	548.5
50	3.0000	.45000	41.000	.5200-01	.4290-01	.5810-01	.1778-02	.1468-02	.1987-02	1.089	12.41	548.5
50	3.0000	.47500	42.000	.4300-01	.3550-01	.4800-01	.1470-02	.1214-02	.1642-02	.9030	10.04	546.8
50	3.0000	.50000	43.000	.2930-01	.2430-01	.3280-01	.1004-02	.8301-03	.1121-02	.6180	6.884	545.1
50	3.0000	.52500	44.000	.1940-01	.1600-01	.2160-01	.6620-03	.5476-03	.7391-03	.4090	4.800	543.0
50	3.0000	.55000	45.000	.1610-01	.1330-01	.1800-01	.5555-03	.4555-03	.6147-03	.3400	3.793	542.8
50	3.0000	.60000	46.000	.1080-01	.9000-02	.1210-01	.3700-03	.3062-03	.4130-03	.2290	2.495	541.3
50	3.0000	.65000	47.000	.6900-02	.5700-02	.7700-02	.3358-03	.1950-03	.2629-03	.1460	1.552	541.1
50	3.0000	.70000	48.000	.4800-02	.4000-02	.5400-02	.1646-03	.1383-03	.1837-03	.1020	1.128	546.5
50	3.0000	.75000	49.000	.3800-02	.3100-02	.4200-02	.1300-03	.1076-03	.1450-03	.8100-01	.8780	540.5
50	3.0000	.80000	50.000	.1800-02	.1500-02	.2000-02	.5994-04	.4982-04	.6689-04	.3700-01	.3980	540.4
50	3.0000	.85000	51.000	.1500-02	.1200-02	.1700-02	.5068-04	.4182-04	.5656-04	.3100-01	.3880	542.4
50	3.0000	.87500	52.000	.5900-02	.4800-02	.6500-02	.2005-03	.1658-03	.2239-03	.1240	1.533	543.5
50	3.0000	.90000	53.000	.4400-02	.3600-02	.4900-02	.1495-03	.1239-03	.1674-03	.8200-01	1.287	544.2
50	3.0000	.92500	54.000	.6000-02	.4900-02	.6700-02	.2039-03	.1686-03	.2277-03	.1280	1.646	544.8
50	3.0000	.95000	55.000	.8100-02	.5100-02	.6800-02	.2097-03	.1735-03	.2341-03	.1280	1.311	543.5
50	4.0000	.20000	71.000	.4200-01	.3480-01	.4700-01	.1437-02	.1184-02	.1809-02	.8680	9.849	557.2
50	4.0000	.22500	72.000	.3250-01	.2680-01	.3830-01	.1111-02	.9184-03	.1243-02	.6750	7.883	553.1
50	4.0000	.25000	73.000	.2530-01	.2090-01	.2830-01	.6669-03	.7155-03	.9687-03	.5309	6.195	549.5
50	4.0000	.27500	74.000	.2430-01	.2010-01	.2720-01	.8327-03	.6880-03	.9307-03	.5110	6.308	547.9
50	4.0000	.30000	56.000	.2150-01	.1780-01	.2400-01	.7355-03	.6080-03	.8277-03	.4520	5.924	545.8
50	4.0000	.32500	57.000	.4140-01	.3420-01	.4630-01	.1416-02	.1170-02	.1583-02	.8670	11.33	549.1
50	4.0000	.35000	58.000	.5700-01	.4390-01	.6380-01	.1949-02	.1871-02	.2181-02	1.183	15.43	554.0
50	4.0000	.37500	59.000	.4150-01	.3420-01	.4630-01	.1418-02	.1171-02	.1585-02	.8690	11.37	548.1
50	4.0000	.40000	60.000	.2560-01	.2120-01	.2860-01	.8753-03	.7236-03	.9778-03	.5390	7.051	545.8
50	4.0000	.42500	61.000	.1790-01	.1480-01	.2000-01	.6136-03	.5076-03	.6852-03	.3790	4.965	543.7

DATE 07 OCT 75

OH-74 (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 295

OH-74 (AEDC V418-88A) B62C12F10M18M127E5E2V6R19

(RV8003)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H1GTO BTU/R FT2SEC	H1TO BTU/R FT2SEC	H1TAM BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
50	4.0000	.48000	62.000	.1270-01	.1050-01	.1420-01	.4381-03	.3808-03	.4889-03	.2700	3.484	942.8
50	4.0000	.47500	63.000	.0600-02	.6000-02	.1070-01	.3267-03	.2720-03	.3670-03	.2030	2.993	942.0
50	4.0000	.50000	64.000	.7000-02	.5800-02	.7800-02	.2405-03	.1990-03	.2684-03	.1490	1.847	941.3
50	4.0000	.52500	65.000	.5600-02	.4600-02	.6200-02	.1899-03	.1572-03	.2119-03	.1180	1.460	940.8
50	4.0000	.55000	66.000	.5600-02	.4600-02	.6200-02	.1901-03	.1574-03	.2121-03	.1180	1.388	940.3
50	4.0000	.60000	67.000	.3800-02	.3100-02	.4200-02	.1288-03	.1066-03	.1437-03	.8000-01	.9020	939.8
50	4.0000	.65000	68.000	.2800-02	.2300-02	.3100-02	.9547-04	.7905-04	.1055-03	.5900-01	.6970	939.8
50	4.0000	.70000	69.000	.1100-02	.9000-03	.1300-02	.3919-04	.3245-04	.4373-04	.2400-01	.2720	940.0
50	4.0000	.75000	70.000	.8000-03	.7000-03	.9000-03	.2723-04	.2255-04	.3038-04	.1700-01	.1890	939.3
50	4.0000	.80000	75.000	.1100-02	.9000-03	.1200-02	.3774-04	.3125-04	.4212-04	.2300-01	.2630	940.0
50	4.0000	.85000	76.000	.1700-02	.1400-02	.1900-02	.5784-04	.4791-04	.6454-04	.3600-01	.4270	939.1
50	4.0000	.87500	77.000	.1900-02	.1600-02	.2100-02	.8464-04	.5350-04	.7214-04	.4000-01	.5260	940.9
50	4.0000	.90000	78.000	.3000-02	.2500-02	.3400-02	.1035-03	.8562-04	.1155-03	.8400-01	.8310	941.9
50	4.0000	.92500	79.000	.4100-02	.3400-02	.4600-02	.1409-03	.1166-03	.1573-03	.8700-01	1.082	941.7
50	4.0000	.95000	80.000	.4200-02	.3500-02	.4700-02	.1430-03	.1184-03	.1597-03	.8900-01	1.039	942.3

DATE 07 OCT 75

04-74 (AEDC W41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 256

04-74 (AEDC W41B-88A) 862C12F10H16M127E52V8R19

(RV8003)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
51	7.980	39.78	420.9	1291.	166.7	2.300	84.00	.4400-01	1.953	3791.	.3911-04	.7567-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175 .2892-01
51	1.960	.3428-01	.2892-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=1.0	H19TO BTU/ R FT ² SEC	H1TO BTU/ R FT ² SEC	H1TAM BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTMDT DEG. R /SEC	TH DEG. R
51	1.0000	.27500	1.0000	.1770-01	.1460-01	.1970-01	.6060-03	.5012-03	.6768-03	.3740	3.876	544.5
51	1.0000	.30000	2.0000	.1250-01	.1280-01	.1730-01	.5305-03	.4388-03	.5924-03	.3280	3.478	543.9
51	1.0000	.32500	3.0000	.1260-01	.1040-01	.1400-01	.4310-03	.3566-03	.4811-03	.2670	2.741	542.7
51	1.0000	.35000	4.0000	.1800-01	.1490-01	.2010-01	.6174-03	.5109-03	.6893-03	.3820	3.963	542.9
51	1.0000	.37500	5.0000	.2260-01	.1870-01	.2530-01	.7757-03	.6416-03	.8662-03	.4790	5.035	544.1
51	1.0000	.40000	6.0000	.2330-01	.1930-01	.2610-01	.8000-03	.6618-03	.8933-03	.4950	5.080	543.6
51	1.0000	.42500	7.0000	.1890-01	.1560-01	.2110-01	.6466-03	.5349-03	.7219-03	.4000	4.145	543.4
51	1.0000	.45000	8.0000	.2960-01	.2450-01	.3310-01	.1015-02	.8394-03	.1133-02	.6270	6.405	544.2
51	1.0000	.47500	9.0000	.3050-01	.2520-01	.3400-01	.1044-02	.8634-03	.1166-02	.6440	6.549	545.0
51	1.0000	.50000	10.000	.2440-01	.2020-01	.2730-01	.8380-03	.6932-03	.9357-03	.5180	5.247	543.7
51	1.0000	.52500	11.000	.3550-01	.2940-01	.3970-01	.1217-02	.1006-02	.1359-02	.7500	7.594	545.4
51	1.0000	.55000	12.000	.3550-01	.2940-01	.3970-01	.1218-02	.1007-02	.1360-02	.7510	7.534	545.1
51	1.0000	.60000	13.000	.3010-01	.2490-01	.3360-01	.1031-02	.8524-03	.1152-02	.6350	6.431	545.5
51	1.0000	.65000	14.000	.3050-01	.2520-01	.3413-01	.1046-02	.8646-03	.1168-02	.6450	6.525	545.2
51	1.0000	.70000	15.000	.1130-01	.9300-02	.1260-01	.3670-03	.3203-03	.4320-03	.2400	2.345	542.4
51	1.0000	.75000	16.000	.4700-02	.3900-02	.5300-02	.1625-03	.1345-03	.1814-03	.1010	1.022	541.4
51	1.0000	.80000	17.000	.1600-02	.1300-02	.1800-02	.5398-04	.4469-04	.6024-04	.3400-01	.3250	541.0
51	1.0000	.85000	18.000	.1800-01	.1490-01	.2010-01	.6167-03	.5100-03	.6878-03	.3800	4.458	545.1
51	2.0000	.33700	19.000	.2170-01	.1800-01	.2430-01	.7450-03	.6161-03	.8320-03	.4600	5.416	544.9
51	2.0000	.39000	20.000	.2770-01	.2290-01	.3100-01	.9508-03	.7861-03	.1062-02	.5860	6.905	545.3
51	2.0000	.42600	21.000	.3780-01	.3120-01	.4220-01	.1296-02	.1071-02	.1447-02	.7970	9.339	546.4
51	2.0000	.47800	22.000	.3060-01	.2530-01	.3410-01	.1048-02	.8663-03	.1170-02	.6460	7.192	545.3

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

OH-7A (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 257

OH-7A (AEDC V41B-BBA) 862C12F10M16M127E52V8R19

(RV8003)

RUN NUMBER	TRA/E	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H19T0 FT/SEC	H1T0 BTU/R	H1TAN FT/SEC	QDOT BTU/FT/SEC	DTMDT DEG/R	TN DEG/R
51	2.0000	.53000	23.000	.3110-01	.2570-01	.3480-01	.1068-02	.6826-03	.1193-02	.6570	7.316	546.1
51	2.0000	.56700	24.000	.2170-01	.1800-01	.2430-01	.7452-03	.6164-03	.8321-03	.4600	5.004	544.0
51	2.0000	.62000	25.000	.1470-01	.1220-01	.1650-01	.5055-03	.4183-03	.5643-03	.3130	3.404	542.7
51	2.0000	.67000	26.000	.6700-02	.5600-02	.7500-02	.2309-03	.1911-03	.2577-03	.1430	1.559	541.4
51	2.0000	.70500	27.000	.4700-02	.3900-02	.5200-02	.1607-03	.1331-03	.1754-03	.1000+00	1.077	540.5
51	2.0000	.75000	28.000	.2500-02	.2100-02	.2800-02	.3499-04	.7038-04	.9483-04	.5300-01	.5810	539.8
51	2.0000	.80000	29.000	.2200-02	.1800-02	.2400-02	.7478-04	.6192-04	.8345-04	.4600-01	.5140	540.3
51	2.0000	.82400	30.000	.5000-03	.4000-03	.6000-03	.1816-04	.1504-04	.2027-04	.1100-01	.1570	540.4
51	3.0000	.20000	31.000	.3740-01	.3090-01	.4180-01	.1282-02	.1058-02	.1433-02	.7830	8.271	551.3
51	3.0000	.22500	32.000	.3110-01	.2560-01	.3470-01	.1065-02	.8791-03	.1190-02	.6510	7.264	550.5
51	3.0000	.25000	33.000	.2390-01	.1970-01	.2670-01	.8184-03	.6762-03	.9146-03	.5030	5.615	547.9
51	3.0000	.27500	34.000	.1880-01	.1560-01	.2100-01	.6459-03	.5340-03	.7215-03	.3980	4.761	545.9
51	3.0000	.30000	35.000	.1830-01	.1510-01	.2050-01	.6280-03	.5193-03	.7013-03	.3880	4.794	544.8
51	3.0000	.32500	36.000	.2980-01	.2460-01	.3320-01	.1020-02	.8432-03	.1139-02	.5280	7.358	546.0
51	3.0000	.35000	37.000	.3570-01	.2950-01	.3990-01	.1225-02	.1013-02	.1368-02	.7550	8.747	545.9
51	3.0000	.37500	38.000	.2980-01	.2460-01	.3330-01	.122-02	.8449-03	.1142-02	.6300	7.375	545.9
51	3.0000	.40000	39.000	.2910-01	.2410-01	.3260-01	.9991-03	.8263-03	.1116-02	.6170	7.266	544.7
51	3.0000	.42500	40.000	.4000-01	.3300-01	.4470-01	.1370-02	.1132-02	.1131-02	.6140	7.006	545.0
51	3.0000	.45000	41.000	.2900-01	.2400-01	.3240-01	.9946-03	.8225-03	.1111-02	.6150	6.851	545.2
51	3.0000	.47500	42.000	.2910-01	.2410-01	.3250-01	.9979-03	.8252-03	.1115-02	.6150	6.851	543.9
51	3.0000	.50000	43.000	.2200-01	.1820-01	.2450-01	.7531-03	.6230-03	.8409-03	.4650	5.185	543.9
51	3.0000	.52500	44.000	.1390-01	.1150-01	.1950-01	.4754-03	.3935-03	.5307-03	.2950	3.459	542.0
51	3.0000	.55000	45.000	.1130-01	.9300-02	.1260-01	.3850-03	.3194-03	.4307-03	.2390	2.671	541.4
51	3.0000	.60000	46.000	.7000-02	.5800-02	.7800-02	.2385-03	.1975-03	.2662-03	.1460	1.614	540.4
51	3.0000	.65000	47.000	.5200-02	.4300-02	.5800-02	.1768-03	.1464-03	.1973-03	.1100	1.170	539.7
51	3.0000	.70000	48.000	.2300-02	.1900-02	.2600-02	.8032-04	.6653-04	.8961-04	.5000-01	.5530	539.1
51	3.0000	.75000	49.000	.2000-02	.1600-02	.2200-02	.6726-04	.5571-04	.7504-04	.4200-01	.4560	539.4
51	3.0000	.80000	51.000	.1300-02	.1000-02	.1400-02	.4292-04	.3554-04	.4789-04	.2700-01	.2860	540.0
51	3.0000	.85000	51.000	.8000-03	.6000-03	.8070-03	.2579-04	.2135-04	.2879-04	.1600-01	.1980	541.2
51	3.0000	.87500	52.000	.1600-02	.1300-02	.1800-02	.5411-04	.4479-04	.6040-04	.3400-01	.4160	541.7
51	3.0000	.90000	53.000	.1800-02	.1500-02	.2000-02	.6056-04	.5012-04	.6760-04	.3800-01	.5230	542.0
51	3.0000	.92500	54.000	.2400-02	.2000-02	.2600-02	.8113-04	.6715-04	.9057-04	.5000-01	.6600	542.1
51	3.0000	.95000	55.000	.3000-02	.2500-02	.3300-02	.1028-03	.8509-04	.1148-03	.6400-01	.6460	542.0
51	4.0000	.20000	71.000	.3960-01	.3270-01	.4430-01	.1357-02	.1119-02	.1518-02	.8240	9.361	552.5
51	4.0000	.22500	72.000	.3180-01	.2620-01	.3550-01	.1089-02	.8983-03	.1218-02	.6630	7.745	550.3
51	4.0000	.25000	73.000	.2800-01	.2310-01	.3130-01	.9584-03	.7914-03	.1071-02	.5860	6.852	549.6
51	4.0000	.27500	74.000	.3100-01	.2560-01	.3470-01	.1063-02	.8776-03	.1188-02	.6510	8.030	548.2
51	4.0000	.30000	56.000	.3310-01	.2730-01	.3690-01	.1133-02	.9361-03	.1276-02	.6950	9.093	548.9
51	4.0000	.32500	57.000	.3640-01	.3000-01	.4060-01	.1247-02	.1030-02	.1393-02	.7840	9.991	547.6
51	4.0000	.35000	58.000	.2830-01	.2340-01	.3160-01	.9698-03	.8013-03	.1084-02	.5960	7.792	545.9
51	4.0000	.37500	59.000	.2970-01	.2460-01	.3320-01	.1019-02	.8426-03	.1139-02	.6280	8.221	544.3
51	4.0000	.40000	60.000	.1990-01	.1640-01	.2220-01	.6815-03	.5637-03	.7610-03	.4210	5.515	542.5
51	4.0000	.42500	61.000	.1200-01	.9900-02	.1340-01	.4118-03	.3408-03	.4598-03	.2550	3.345	

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 258

04-74 (AEDC V41B-B8A) B62C12F10H18H127E32V0R19

(RV0003)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1(TO) BTU/ R FT2SEC	H1(TO) BTU/ R FT2SEC	H1(TAN) BTU/ R FT2SEC	ODOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TM DEG. R
51	4.0000	.45000	62.000	.8300-02	.6900-02	.9300-02	.2852-03	.2161-03	.3183-03	.1770	2.298	541.2
51	4.0000	.47500	63.000	.6800-02	.5600-02	.7600-02	.2334-03	.1932-03	.2605-03	.1450	1.848	540.8
51	4.0000	.50000	64.000	.5200-02	.4300-02	.5800-02	.1782-03	.1475-03	.1988-03	.1110	1.374	540.0
51	4.0000	.52500	65.000	.4300-02	.3500-02	.4800-02	.1464-03	.1212-03	.1633-03	.9100-01	1.130	539.6
51	4.0000	.55000	66.000	.3300-02	.2800-02	.3700-02	.1141-03	.9448-04	.1273-03	.7100-01	.8340	539.6
51	4.0000	.60000	67.000	.1900-02	.1600-02	.2200-02	.6614-04	.5480-04	.7378-04	.4100-01	.4650	538.5
51	4.0000	.65000	68.000	.9000-03	.7000-03	.1000-02	.3068-04	.2542-04	.3423-04	.1900-01	.2250	538.7
51	4.0000	.70000	69.000	.1200-02	.1000-02	.1300-02	.4089-04	.3386-04	.4562-04	.2500-01	.2840	539.5
51	4.0000	.75000	70.000	.9000-03	.8000-03	.1000-02	.3123-04	.2586-04	.3484-04	.1900-01	.2170	539.5
51	4.0000	.80000	75.000	.6000-03	.5000-03	.7000-03	.2038-04	.1687-04	.2274-04	.1300-01	.1530	540.6
51	4.0000	.85000	76.000	.1900-02	.1500-02	.2100-02	.6404-04	.5304-04	.7146-04	.4000-01	.4730	539.7
51	4.0000	.87500	77.000	.1200-02	.1000-02	.1300-02	.4004-04	.3315-04	.4469-04	.2500-01	.3260	541.1
51	4.0000	.90000	78.000	.9000-03	.8000-03	.1000-02	.3166-04	.2621-04	.3534-04	.2000-01	.2550	541.5
51	4.0000	.92500	79.000	.1700-02	.1400-02	.1900-02	.5988-04	.4956-04	.6683-04	.3700-01	.4800	541.7
51	4.0000	.95000	80.000	.3100-02	.2600-02	.3500-02	.1060-03	.8774-04	.1184-03	.6600-01	.7710	542.5

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 259

OH-74 (AEDC V41B-B8A) B62C12F10H16M127E52V8R19

(RV8003)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	O PSIA	V FT/SEC	R-0 SLUOS /FT2	MU LB-SEC /FT2
109	7.980	19.81	546.5	1309.	-168.6	2.000	95.30	.5700-01	2.536	3817.	.5009-04	.7672-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175
109	2.492	.3916-01	.2560-01

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(GTO) BTU/ R FT2SEC	H(TO) BTU/ R FT2SEC	HITAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
109	1.0000	.27500	1.0000	.1650-01	.1360-01	.1840-01	.6446-03	.5338-03	.7193-03	.4060	4.205	547.5
109	1.0000	.30000	2.0000	.1350-01	.1120-01	.1500-01	.5282-03	.4374-03	.5993-03	.3330	3.530	547.2
109	1.0000	.32500	3.0000	.1140-01	.9400-02	.1270-01	.4448-03	.3685-03	.4962-03	.2810	2.883	546.2
109	1.0000	.35000	4.0000	.1140-01	.9400-02	.1270-01	.4460-03	.3695-03	.4975-03	.2820	2.917	546.2
109	1.0000	.37500	5.0000	.1080-01	.9000-02	.1210-01	.4246-03	.3518-03	.4736-03	.2690	2.819	545.7
109	1.0000	.40000	6.0000	.1270-01	.1050-01	.1410-01	.4964-03	.4113-03	.5637-03	.3140	3.222	545.5
109	1.0000	.42500	7.0000	.1290-01	.1070-01	.1440-01	.5047-03	.4181-03	.5630-03	.3190	3.302	546.1
109	1.0000	.45000	8.0000	.1390-01	.1150-01	.1550-01	.5431-03	.4499-03	.6058-03	.3430	3.504	546.1
109	1.0000	.47500	9.0000	.1750-01	.1450-01	.1960-01	.6865-03	.5687-03	.7858-03	.4340	4.409	546.1
109	1.0000	.50000	10.0000	.2060-01	.1700-01	.2290-01	.8025-03	.6673-03	.8986-03	.5090	5.148	546.3
109	1.0000	.52500	11.0000	.1910-01	.1560-01	.2130-01	.7475-03	.6192-03	.8339-03	.4720	4.778	546.2
109	1.0000	.55000	12.0000	.1830-01	.1510-01	.2040-01	.7182-03	.5925-03	.7977-03	.4520	4.537	545.5
109	1.0000	.60000	13.0000	.2270-01	.1880-01	.2530-01	.8884-03	.7358-03	.9913-03	.5610	5.668	547.1
109	1.0000	.65000	14.0000	.2830-01	.2340-01	.3160-01	.1107-02	.9167-03	.1235-02	.6980	7.050	548.0
109	1.0000	.70000	15.0000	.3330-01	.2750-01	.3710-01	.1303-02	.1078-02	.1454-02	.8190	7.983	549.2
109	1.0000	.75000	16.0000	.3870-01	.3210-01	.4320-01	.1517-02	.1255-02	.1693-02	.9530	9.628	549.5
109	1.0000	.80000	17.0000	.5330-01	.4400-01	.5950-01	.2086-02	.1725-02	.2330-02	1.303	12.56	553.5
109	2.0000	.28500	18.0000	.1470-01	.1220-01	.1640-01	.5756-03	.4765-03	.6473-03	.3620	4.241	548.4
109	2.0000	.33700	19.0000	.1280-01	.1060-01	.1430-01	.5020-03	.4158-03	.5602-03	.3170	3.727	547.2
109	2.0000	.39000	20.0000	.1480-01	.1230-01	.1650-01	.5802-03	.4806-03	.6472-03	.3670	4.315	546.4
109	2.0000	.42600	21.0000	.1570-01	.1300-01	.1750-01	.6153-03	.5096-03	.6865-03	.3880	4.549	546.8
109	2.0000	.47800	22.0000	.2400-01	.1990-01	.2680-01	.9410-03	.7792-03	.1050-02	.5930	6.597	547.6

DATE 07 OCT 75

04-74 (AEDC V41B-88A). HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 260

(RV8003)

04-74 (AEDC V41B-88A) B62C12F10H16H127E52V8R19

RUN NUMBER	TRAE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(9TO) BTU/ R FTSEC	H(10) BTU/ R FTSEC	H(11A) BTU/ R FTSEC	QDOT BTU/ FTSEC	DTMOT DEG. R /SEC	TM DEG. R
109	2.0000	.53000	23.000	.2580-01	.2120-01	.2650-01	.1001-02	.8288-03	.1117-02	.6300	7.007	548.4
109	2.0000	.56700	24.000	.3020-01	.2500-01	.3370-01	.1184-02	.8789-03	.1321-02	.7450	8.078	548.7
109	2.0000	.62000	25.000	.4040-01	.3350-01	.4510-01	.1583-02	.1310-02	.1767-02	.9940	10.77	550.4
109	2.0000	.67000	26.000	.6000-01	.4980-01	.6700-01	.2348-02	.1941-02	.2622-02	1.488	15.88	553.0
109	2.0000	.70500	27.000	.1130-01	.5650-01	.7640-01	.2676-02	.2212-02	.2990-02	1.687	17.85	555.1
109	2.0000	.75000	28.000	.4910-01	.4060-01	.5480-01	.1922-02	.1590-02	.2148-02	1.206	13.19	550.7
109	2.0000	.80000	29.000	.2440-01	.2020-01	.2720-01	.9556-03	.7911-03	.1067-02	6.620	6.620	548.6
109	2.0000	.82400	30.000	.1100-01	.9100-02	.1220-01	.4295-03	.3556-03	.4794-03	.2710	3.763	547.6
109	3.0000	.20000	31.000	.3360-01	.2780-01	.3760-01	.1317-02	.1089-02	.1471-02	.8230	8.685	553.5
109	3.0000	.22500	32.000	.2530-01	.2150-01	.2900-01	.1016-02	.8399-03	.1135-02	6.350	7.078	553.0
109	3.0000	.25000	33.000	.1980-01	.1640-01	.2210-01	.7738-03	.8403-03	.8640-03	4.980	5.418	548.9
109	3.0000	.27500	34.000	.1530-01	.1270-01	.1710-01	.5982-03	.4980-03	.8688-03	.3770	4.505	548.9
109	3.0000	.30000	35.000	.1330-01	.1100-01	.1480-01	.5182-03	.4299-03	.5794-03	.3270	4.044	547.7
109	3.0000	.32500	36.000	.1520-01	.1120-01	.1510-01	.5290-03	.4380-03	.5903-03	.3340	3.904	547.6
109	3.0000	.35000	37.000	.1520-01	.1260-01	.1700-01	.5957-03	.4933-03	.6646-03	.3760	4.354	547.1
109	3.0000	.37500	38.000	.1510-01	.1250-01	.1690-01	.5919-03	.4902-03	.6603-03	.3740	4.374	546.9
109	3.0000	.40000	39.000	.1980-01	.1640-01	.2210-01	.7738-03	.8403-03	.8688-03	.3740	5.766	546.7
109	3.0000	.42500	40.000	.2690-01	.2380-01	.3000-01	.1053-02	.8718-03	.1175-02	.6630	7.832	548.9
109	3.0000	.45000	41.000	.2870-01	.2380-01	.3200-01	.1123-02	.9301-03	.1253-02	.7080	8.074	547.8
109	3.0000	.47500	42.000	.2870-01	.2380-01	.3200-01	.1124-02	.9303-03	.1254-02	.7080	7.865	548.4
109	3.0000	.50000	43.000	.3360-01	.2780-01	.3750-01	.1316-02	.1089-02	.1469-02	.9680	9.191	549.4
109	3.0000	.52500	44.000	.3930-01	.3260-01	.4390-01	.1540-02	.1275-02	.1719-02	.8270	11.32	549.6
109	3.0000	.55000	45.000	.5000-01	.4140-01	.5590-01	.1959-02	.1620-02	.2188-02	1.227	13.62	551.6
109	3.0000	.60000	46.000	.8150-01	.6740-01	.9110-01	.3193-02	.2638-02	.3568-02	1.987	21.47	555.6
109	3.0000	.65000	47.000	.4940-01	.4080-01	.5510-01	.1932-02	.1599-02	.2157-02	1.213	12.82	550.5
109	3.0000	.70000	48.000	.2350-01	.1950-01	.2630-01	.9218-03	.7635-03	.1028-02	.5820	6.408	546.9
109	3.0000	.75000	49.000	.1540-01	.1280-01	.1720-01	.6049-03	.5012-03	.6748-03	.3830	4.153	545.8
109	3.0000	.80000	50.000	.1290-01	.1070-01	.1440-01	.5045-03	.4180-03	.5628-03	.3190	3.413	545.9
109	3.0000	.85000	51.000	.1270-01	.1050-01	.1420-01	.4975-03	.4120-03	.5550-03	.3140	3.879	547.1
109	3.0000	.87500	52.000	.4130-01	.3420-01	.4611-01	.618-02	.1337-02	.1807-02	1.010	12.44	553.6
109	3.0000	.90000	53.000	.2010-01	.1660-01	.2240-01	.7852-03	.6495-03	.8768-03	.4920	6.825	551.5
109	3.0000	.92500	54.000	.1680-01	.1390-01	.1880-01	.6598-03	.5460-03	.7365-03	.4140	5.413	550.1
109	3.0000	.95000	55.000	.1960-01	.1620-01	.2190-01	.7685-03	.6345-03	.8556-03	.4820	4.869	549.2
109	4.0000	.20000	71.000	.4390-01	.3620-01	.4903-01	.1718-02	.1418-02	.1920-02	1.064	12.06	558.7
109	4.0000	.22500	72.000	.3060-01	.2530-01	.3420-01	.1198-02	.9902-03	.1339-02	.7460	8.703	555.2
109	4.0000	.25000	73.000	.2230-01	.1850-01	.2490-01	.8742-03	.7229-03	.9764-03	.5470	6.380	552.9
109	4.0000	.27500	74.000	.1840-01	.1520-01	.2050-01	.7196-03	.5953-03	.8035-03	.4510	5.562	551.3
109	4.0000	.30000	75.000	.1630-01	.1350-01	.1820-01	.6388-03	.5287-03	.7130-03	.4020	5.251	549.1
109	4.0000	.32500	76.000	.1670-01	.1380-01	.1860-01	.6532-03	.5406-03	.7290-03	.4110	5.370	549.2
109	4.0000	.35000	77.000	.2460-01	.2040-01	.2750-01	.9639-03	.7977-03	.1076-02	.6060	7.915	549.7
109	4.0000	.37500	78.000	.3520-01	.2910-01	.3930-01	.1377-02	.1139-02	.1538-02	.8630	11.27	551.1
109	4.0000	.40000	79.000	.4720-01	.3900-01	.5270-01	.1518-02	.1528-02	.2084-02	1.195	15.07	553.2
109	4.0000	.42500	81.000	.5730-01	.4730-01	.6400-01	.2243-02	.1894-02	.2505-02	1.400	18.26	553.7

DATE 07 OCT 75

OH-7A (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 261

(RV8003)

OH-7A (AEDC V41B-88A) 882C12F10M16M127E52V8R19

RUN NUMBER	TRA/E	X/L	T/C NO	W/HREF R=0.9	W/HREF R=1.0	W/HREF R=TAM	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM1 BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TM DEG. R
109	4.0000	.45000	62.000	.7620-01	.6290-01	.8920-01	.2983-02	.2464-02	.3335-02	1.852	23.83	957.2
109	4.0000	.47500	63.000	.8580-01	.7070-01	.9600-01	.3360-02	.2770-02	.3760-02	2.066	26.05	963.2
109	4.0000	.50000	64.000	.6760-01	.5580-01	.7950-01	.2645-02	.2184-02	.2957-02	1.641	20.17	957.7
109	4.0000	.52500	65.000	.4700-01	.3680-01	.5250-01	.1839-02	.1520-02	.2054-02	1.150	14.17	952.8
109	4.0000	.55000	66.000	.3110-01	.2570-01	.3470-01	.1217-02	.1007-02	.1358-02	.7660	8.967	948.2
109	4.0000	.60000	67.000	.1800-01	.1430-01	.2000-01	.7033-03	.5827-03	.7845-03	.4450	5.004	945.4
109	4.0000	.65000	68.000	.1350-01	.1120-01	.1510-01	.5296-03	.4388-03	.5906-03	.3350	3.930	944.9
109	4.0000	.70000	69.000	.9800-02	.8100-02	.1090-01	.3839-03	.3182-03	.4282-03	.2430	2.708	944.6
109	4.0000	.75000	70.000	.8900-02	.7300-02	.9900-02	.3467-03	.2874-03	.3867-03	.2200	2.448	944.3
109	4.0000	.80000	75.000	.3800-02	.3100-02	.4200-02	.1480-03	.1227-03	.1650-03	.9400-01	1.131	943.8
109	4.0000	.85000	76.000	.4100-02	.3400-02	.4600-02	.1620-03	.1343-03	.1806-03	.1030	1.219	943.3
109	4.0000	.87500	77.000	.5400-02	.4500-02	.6000-02	.2106-03	.1745-03	.2349-03	.1330	1.747	944.8
109	4.0000	.90000	78.000	.1370-01	.1140-01	.1530-01	.5367-03	.4445-03	.5988-03	.3390	4.381	947.0
109	4.0000	.92500	79.000	.1890-01	.1570-01	.2110-01	.7412-03	.6136-03	.8272-03	.4660	5.759	948.8
109	4.0000	.95000	80.000	.7100-02	.5900-02	.8000-02	.2796-03	.2317-03	.3120-03	.1770	2.069	946.2

DATE 07 OCT 75

OH-74 (AEDC W41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 262

OH-74 (AEDC W41B-88A) B62C12F10M16M127E32V8R19

(R45003)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	R-0 SLUOS /FT3	HJ LB-SEC /FT2
110	7.980	29.83	547.0	1310.	-80.00	2.000	95.40	.5700-01	2.538	3819.	.5010-04	.7678-07

RUN NUMBER	RNU/L X10 6 /FT	WREF BTU/ R FT2SEC	SIN NO R= .0175 .2560-01
110	2.491	.3919-01	.2560-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	W/HREF R=0.9	W/HREF R=1.0	W/HREF R-TAM	H/STO BTU/ R FT2SEC	H/TO BTU/ R FT2SEC	H/TAM BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTNOT DEG. R /SEC	TN DEG. R
110	1.0000	.27500	1.0000	.1600-01	.1320-01	.1780-01	.8264-03	.5187-03	.6989-03	.3950	4.088	547.9
110	1.0000	.30000	2.0000	.1440-01	.1190-01	.1610-01	.5043-03	.4673-03	.6296-03	.3560	3.772	547.7
110	1.0000	.32500	3.0000	.1320-01	.1090-01	.1470-01	.5176-03	.4288-03	.5775-03	.3270	3.356	546.7
110	1.0000	.35000	4.0000	.1480-01	.1230-01	.1650-01	.5805-03	.4808-03	.6477-03	.3670	3.793	547.4
110	1.0000	.37500	5.0000	.1310-01	.1090-01	.1460-01	.5145-03	.4262-03	.5740-03	.3250	3.415	546.6
110	1.0000	.40000	6.0000	.2080-01	.1720-01	.2320-01	.8153-03	.6752-03	.9248-03	.5150	5.277	547.5
110	1.0000	.42500	7.0000	.2120-01	.1750-01	.2350-01	.8288-03	.6862-03	.9248-03	.5230	5.405	548.2
110	1.0000	.45000	8.0000	.2330-01	.1930-01	.2600-01	.9118-03	.7549-03	.1018-02	.5750	5.860	548.7
110	1.0000	.47500	9.0000	.2090-01	.1730-01	.2330-01	.8170-03	.6765-03	.9116-03	.5150	5.232	548.1
110	1.0000	.50000	10.000	.2310-01	.1910-01	.2570-01	.9035-03	.7481-03	.1008-02	.5700	5.759	548.2
110	1.0000	.52500	11.000	.3080-01	.2550-01	.3430-01	.1205-02	.9974-03	.1345-02	.7580	7.656	548.8
110	1.0000	.55000	12.000	.3270-01	.2700-01	.3650-01	.1280-02	.1059-02	.1428-02	.8060	8.069	549.1
110	1.0000	.60000	13.000	.5280-01	.4360-01	.5900-01	.2067-02	.1709-02	.2310-02	1.291	13.00	554.7
110	1.0000	.65000	14.000	.4410-01	.3650-01	.4920-01	.1727-02	.1428-02	.1938-02	1.082	10.92	552.1
110	1.0000	.70000	15.000	.3340-01	.2760-01	.3730-01	.1309-02	.1083-02	.1462-02	.8210	7.987	552.2
110	1.0000	.75000	16.000	.2560-01	.2120-01	.2680-01	.1005-02	.8312-03	.1121-02	.6310	6.371	550.6
110	1.0000	.80000	17.000	.1870-01	.1550-01	.2090-01	.7331-03	.6066-03	.8185-03	.4600	4.443	551.1
110	1.0000	.85000	18.000	.1700-01	.1410-01	.1900-01	.6660-03	.5514-03	.7433-03	.4200	4.907	549.1
110	1.0000	.90000	19.000	.1830-01	.1350-01	.1820-01	.6403-03	.5302-03	.7145-03	.4040	4.754	547.9
110	1.0000	.95000	20.000	.2790-01	.2310-01	.3120-01	.1095-02	.9063-03	.1222-02	.6900	8.107	549.1
110	1.0000	.42500	21.000	.3380-01	.2800-01	.3780-01	.1325-02	.1096-02	.1478-02	.8320	9.720	551.0
110	1.0000	.47800	22.000	.4420-01	.3650-01	.4930-01	.1731-02	.1431-02	.1932-02	1.085	12.04	552.1

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 263

OH-74 (AEDC V418-B8A) B62C12F10H184127E5BVR19

(RV8003)

RUN NUMBER	TRAIL	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R-TAN	H1ST0 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTROT DEG. R /SEC	TH DEG. R
110	2.0000	.53000	23.000	.5030-01	.4570-01	.6180-01	.2167-02	.1790-02	.2421-02	1.350	14.94	956.1
110	2.0000	.56700	24.000	.4680-01	.3870-01	.5230-01	.1833-02	.1516-02	.2048-02	1.148	12.41	953.0
110	2.0000	.62000	25.000	.4310-01	.3500-01	.4880-01	.1666-02	.1349-02	.1812-02	1.070	10.74	950.1
110	2.0000	.67000	26.000	.4000-01	.3200-01	.4570-01	.1450-02	.1133-02	.1596-03	.960	9.290	948.1
110	2.0000	.70500	27.000	.3620-01	.2810-01	.4260-01	.1240-02	.0923-02	.1283-03	.810	8.364	947.7
110	2.0000	.75000	28.000	.3270-01	.2420-01	.3910-01	.1030-02	.0713-02	.1033-03	.660	7.099	947.5
110	2.0000	.80000	29.000	.2900-01	.2030-01	.3560-01	.0820-02	.0503-02	.0939-03	.510	5.820	948.2
110	2.0000	.82400	30.000	.2400-02	.1600-01	.3210-01	.0610-02	.0287-02	.0939-03	.360	4.820	948.4
110	3.0000	.20000	31.000	.3620-01	.2890-01	.4050-01	.1419-02	.1173-02	.1586-02	.8840	9.323	956.0
110	3.0000	.22500	32.000	.3010-01	.2490-01	.3360-01	.1190-02	.0955-03	.1318-02	.7370	8.208	954.4
110	3.0000	.25000	33.000	.2340-01	.1940-01	.2610-01	.0913-03	.0768-03	.1024-02	.5750	6.416	951.8
110	3.0000	.27500	34.000	.1800-01	.1490-01	.2010-01	.0709-03	.0535-03	.0868-03	.4440	5.300	949.5
110	3.0000	.30000	35.000	.1680-01	.1390-01	.1870-01	.0589-03	.0438-03	.0733-03	.4160	5.131	948.4
110	3.0000	.32500	36.000	.1680-01	.1390-01	.1870-01	.0589-03	.0438-03	.0733-03	.4160	5.131	947.8
110	3.0000	.35000	37.000	.2600-01	.2150-01	.2900-01	.1017-02	.0816-03	.1135-02	.6400	7.402	949.8
110	3.0000	.37500	38.000	.3510-01	.2910-01	.3950-01	.1376-02	.1138-02	.1536-02	.8850	10.10	950.5
110	3.0000	.40000	39.000	.4140-01	.3420-01	.4620-01	.1620-02	.1341-02	.1809-02	1.017	11.95	951.2
110	3.0000	.42500	40.000	.4350-01	.3590-01	.4860-01	.1703-02	.1408-02	.1902-02	1.064	12.95	954.0
110	3.0000	.45000	41.000	.5640-01	.4660-01	.6300-01	.2210-02	.1827-02	.2469-02	1.380	15.68	954.8
110	3.0000	.47500	42.000	.5290-01	.4370-01	.5910-01	.2073-02	.1713-02	.2316-02	1.293	14.32	955.1
110	3.0000	.50000	43.000	.3600-01	.2980-01	.4020-01	.1410-02	.1167-02	.1575-02	.8850	9.826	951.3
110	3.0000	.52500	44.000	.2450-01	.2030-01	.2730-01	.0959-03	.0797-03	.1071-02	.6050	7.072	949.1
110	3.0000	.55000	45.000	.1930-01	.1600-01	.2150-01	.0762-03	.0622-03	.0843-03	.4770	5.302	948.2
110	3.0000	.60000	46.000	.1180-01	.0900-02	.1310-01	.0408-03	.0381-03	.0514-03	.2910	3.162	946.8
110	3.0000	.65000	47.000	.7800-02	.5000-02	.8700-02	.3052-03	.2528-03	.3404-03	.1930	2.047	946.0
110	3.0000	.70000	48.000	.5500-02	.4600-02	.6200-02	.2168-03	.1797-03	.2419-03	.1370	1.512	946.0
110	3.0000	.75000	49.000	.5100-02	.4200-02	.5700-02	.1982-03	.1650-03	.2221-03	.1260	1.369	946.0
110	3.0000	.80000	50.000	.2600-02	.2200-02	.2900-02	.1033-03	.0858-04	.1152-03	.6500-01	.6990	946.4
110	3.0000	.85000	51.000	.3900-02	.3300-02	.4400-02	.1540-03	.1275-03	.1719-03	.9700-01	1.196	949.7
110	3.0000	.87500	52.000	.6200-02	.5200-02	.7000-02	.2446-03	.2024-03	.2730-03	.1540	1.895	950.7
110	3.0000	.90000	53.000	.7800-02	.6400-02	.8700-02	.3052-03	.2525-03	.3407-03	.1920	2.658	951.3
110	3.0000	.92500	54.000	.1160-01	.0900-02	.1230-01	.0430-03	.0366-03	.0813-03	.2700	3.532	951.5
110	3.0000	.95000	55.000	.1160-01	.0900-02	.1230-01	.0430-03	.0366-03	.0813-03	.2700	3.532	949.7
110	4.0000	.20000	71.000	.4350-01	.3590-01	.4870-01	.1705-02	.1406-02	.1907-02	1.052	11.91	951.8
110	4.0000	.22500	72.000	.3320-01	.2740-01	.3710-01	.1301-02	.1075-02	.1455-02	.8100	9.432	956.9
110	4.0000	.25000	73.000	.2570-01	.2130-01	.2880-01	.1008-02	.0836-03	.1127-02	.6300	7.346	954.5
110	4.0000	.27500	74.000	.2390-01	.1980-01	.2670-01	.0963-03	.0742-03	.1046-02	.5660	7.218	953.2
110	4.0000	.30000	76.000	.2190-01	.1810-01	.2440-01	.0877-03	.0707-03	.0975-03	.5390	7.037	950.8
110	4.0000	.32500	77.000	.4160-01	.3440-01	.4650-01	.1629-02	.1346-02	.1820-02	1.017	13.25	954.9
110	4.0000	.35000	78.000	.6040-01	.4990-01	.6760-01	.2367-02	.1963-02	.2647-02	1.465	19.04	960.0
110	4.0000	.37500	79.000	.4630-01	.3820-01	.5170-01	.1813-02	.1498-02	.2026-02	1.131	14.74	955.1
110	4.0000	.40000	80.000	.2680-01	.2380-01	.3210-01	.1127-02	.0928-03	.1259-02	.7080	9.242	951.2
110	4.0000	.42500	81.000	.2080-01	.1720-01	.2320-01	.0855-03	.0670-03	.0903-03	.5130	6.707	949.7

DATE 07 OCT 75

04-74 (AEDC W18-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 264

04-74 (AEDC W18-B8A) 862C12F10H16H127E32V8R19

(RV80031)

RUN NUMBER	TRAE	X/L	T/C NO	M/HREF R=0.9	M/HREF R=1.0	M/HREF R=TAN	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
110	4.0000	.45000	62.000	.1420-01	.1180-01	.1590-01	.5576-03	.4617-03	.6222-03	.3520	4.547	548.0
110	4.0000	.47500	63.000	.1080-01	.9000-02	.1210-01	.4251-03	.3520-03	.4743-03	.2680	3.411	547.6
110	4.0000	.50000	64.000	.7500-02	.6200-02	.8300-02	.2932-03	.2429-03	.3271-03	.1860	2.294	546.2
110	4.0000	.52500	65.000	.6300-02	.5200-02	.7000-02	.2459-03	.2036-03	.2742-03	.1560	1.923	546.2
110	4.0000	.55000	66.000	.5700-02	.4700-02	.6300-02	.2219-03	.1839-03	.2476-03	.1410	1.648	545.1
110	4.0000	.60000	67.000	.3900-02	.3300-02	.4400-02	.1547-03	.1282-03	.1725-03	.9800-01	1.105	544.2
110	4.0000	.65000	68.000	.2800-02	.2300-02	.3100-02	.1053-03	.9061-04	.1219-03	.6900-01	.8130	544.4
110	4.0000	.70000	69.000	.1400-02	.1100-02	.1500-02	.5333-04	.4421-04	.5947-04	.3400-01	.3770	544.3
110	4.0000	.75000	70.000	.1200-02	.1000-02	.1300-02	.4519-04	.3747-04	.5039-04	.2900-01	.3200	544.0
110	4.0000	.80000	75.000	.8000-03	.6000-03	.8000-03	.2977-04	.2468-04	.3320-04	.1920-01	.2260	544.0
110	4.0000	.85000	76.000	.1800-02	.1500-02	.2000-02	.6946-04	.5759-04	.7745-04	.4400-01	.5230	544.0
110	4.0000	.87500	77.000	.2500-02	.2100-02	.2800-02	.9936-04	.8233-04	.1108-03	.6300-01	.8240	545.7
110	4.0000	.90000	78.000	.3600-02	.3000-02	.4000-02	.1405-03	.1164-03	.1567-03	.8900-01	1.150	546.4
110	4.0000	.92500	79.000	.4900-02	.4100-02	.5500-02	.1917-03	.1588-03	.2138-03	.1210	1.499	546.6
110	4.0000	.95000	80.000	.4700-02	.3900-02	.5300-02	.1857-03	.1539-03	.2072-03	.1170	1.373	547.4

DATE 07 OCT 75

ON-74 (AEDC W1B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 265

ORBITER FUSELAGE

ON-74 (AEDC W1B-88A) 882C12F10H18H127E 2V8R19

(RV8003)

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	Y DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
62	7.000	19.92	673.5	134.5	-166.3	2.400	97.50	.7000-01	3.108	3867.	.5982-04	.7853-07

RUN NUMBER	RM/L X10 6 /FT	WREF BTU/ R FT2SEC	STN NO R=
62	2.945	.4324-01	.2348-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	W/HREF R=0.9	W/HREF R=1.0	H/HREF R=TAN	H/GTOI BTU/ R FT2SEC	H/TOI BTU/ R FT2SEC	H/ITAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
62	1.0000	.27500	1.0000	.1600-01	.1330-01	.1780-01	.6958-03	.5793-03	.7736-03	.4640	4.820	541.1
62	1.0000	.30000	2.0000	.1440-01	.1200-01	.1600-01	.6261-03	.5213-03	.6961-03	.4180	4.443	540.8
62	1.0000	.32500	3.0000	.1180-01	.0900-02	.1320-01	.5152-03	.4290-03	.5728-03	.3440	3.540	540.6
62	1.0000	.35000	4.0000	.1150-01	.0700-02	.1290-01	.5068-03	.4220-03	.5634-03	.3390	3.516	540.3
62	1.0000	.37500	5.0000	.1140-01	.0500-02	.1270-01	.4964-03	.4132-03	.5520-03	.3310	3.486	541.4
62	1.0000	.40000	6.0000	.1120-01	.1100-01	.1470-01	.5766-03	.4800-03	.6411-03	.3650	3.956	541.3
62	1.0000	.42500	7.0000	.1350-01	.1120-01	.1500-01	.5870-03	.4885-03	.6528-03	.3910	4.056	542.5
62	1.0000	.45000	8.0000	.1550-01	.1290-01	.1730-01	.6765-03	.4531-03	.7533-03	.4510	4.613	542.1
62	1.0000	.47500	9.0000	.1960-01	.1630-01	.2190-01	.8556-03	.7118-03	.9517-03	.5690	5.787	543.8
62	1.0000	.50000	10.000	.2090-01	.1740-01	.2320-01	.9098-03	.7568-03	.1012-02	.6050	6.121	544.2
62	1.0000	.52500	11.000	.1920-01	.1600-01	.2140-01	.8359-03	.6954-03	.9299-03	.5550	5.624	544.2
62	1.0000	.55000	12.000	.1830-01	.1520-01	.2030-01	.7953-03	.6617-03	.8847-03	.5290	5.344	543.9
62	1.0000	.60000	13.000	.2290-01	.1900-01	.2550-01	.9959-03	.8279-03	.1108-02	.6590	6.611	546.5
62	1.0000	.65000	14.000	.2810-01	.2350-01	.3150-01	.1231-02	.1024-02	.1370-02	.8150	8.247	546.5
62	1.0000	.70000	15.000	.3130-01	.2600-01	.3490-01	.1365-02	.1134-02	.1519-02	.9020	8.795	547.9
62	1.0000	.75000	16.000	.3260-01	.2710-01	.3630-01	.1415-02	.1179-02	.1579-02	.9380	9.478	547.7
62	1.0000	.80000	17.000	.4110-01	.3360-01	.4510-01	.1762-02	.1463-02	.1962-02	1.158	11.17	551.5
62	2.0000	.85000	18.000	.1540-01	.1280-01	.1710-01	.6685-03	.5568-03	.7411-03	.4470	5.267	539.6
62	2.0000	.32700	19.000	.1350-01	.1120-01	.1500-01	.5864-03	.4885-03	.6518-03	.3930	4.641	539.0
62	2.0000	.39000	20.000	.1540-01	.1280-01	.1710-01	.6704-03	.5582-03	.7452-03	.4480	5.293	540.1
62	2.0000	.42500	21.000	.1620-01	.1520-01	.2020-01	.7936-03	.6594-03	.8813-03	.5290	6.210	541.4
62	2.0000	.47800	22.000	.2350-01	.1950-01	.2610-01	.1022-02	.8502-03	.1136-02	.6800	7.575	543.4

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

(RVB003)

OH-74 (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V418-88A) 862C12F10M184127E52/8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H/(STO) BTU/ R FT ² °C	H/(TO) BTU/ R FT ² SEC	H/(TAW) BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DT/OT DEG. R /SEC	IN DEG. R
62	2.0000	.53000	23.000	.2620-01	.2180-01	.2820-01	.1111-02	.9490-03	.1269-02	.7580	8.436	944.7
62	2.0000	.56700	24.000	.3120-01	.2600-01	.3470-01	.1359-02	.1130-02	.1512-02	.9000	9.772	946.3
62	2.0000	.62000	25.000	.3650-01	.3040-01	.4070-01	.1591-02	.1323-02	.1771-02	.1053	11.43	947.0
62	2.0000	.67000	26.000	.4660-01	.4040-01	.5410-01	.2117-02	.1758-02	.2357-02	.1396	15.13	949.5
62	2.0000	.70500	27.000	.6230-01	.5170-01	.6940-01	.2713-02	.2252-02	.3022-02	.1780	19.08	952.6
62	2.0000	.75000	28.000	.5680-01	.4720-01	.6330-01	.2474-02	.2054-02	.2756-02	.1626	17.78	951.4
62	2.0000	.80000	29.000	.3440-01	.2860-01	.3830-01	.1500-02	.1247-02	.1870-02	.9910	10.91	947.9
62	2.0000	.82400	30.000	.1670-01	.1390-01	.1860-01	.7277-03	.6044-03	.8103-03	.4780	6.654	950.0
62	3.0000	.20000	31.000	.3560-01	.2960-01	.3970-01	.1951-02	.1288-02	.1727-02	1.021	10.79	950.5
62	3.0000	.22500	32.000	.2750-01	.2280-01	.3060-01	.1196-02	.9945-03	.1331-02	.7930	8.867	945.8
62	3.0000	.25000	33.000	.2100-01	.1750-01	.2330-01	.9137-03	.7605-03	.1016-02	.6090	6.827	942.0
62	3.0000	.27500	34.000	.1610-01	.1340-01	.1790-01	.7025-03	.5852-03	.7008-03	.4700	5.647	939.2
62	3.0000	.30000	35.000	.1370-01	.1140-01	.1530-01	.5978-03	.4981-03	.6643-03	.4010	4.979	937.8
62	3.0000	.32500	36.000	.1460-01	.1220-01	.1620-01	.6352-03	.5252-03	.7058-03	.4260	5.011	937.9
62	3.0000	.35000	37.000	.1600-01	.1330-01	.1780-01	.6861-03	.5798-03	.7736-03	.4660	5.426	938.7
62	3.0000	.37500	38.000	.1680-01	.1400-01	.1870-01	.7332-03	.6107-03	.8150-03	.4910	5.771	939.1
62	3.0000	.40000	39.000	.2110-01	.1760-01	.2350-01	.9193-03	.7653-03	.1022-02	.6140	7.247	941.0
62	3.0000	.42500	40.000	.2620-01	.2350-01	.3140-01	.1229-02	.1061-02	.1418-02	.8180	9.699	943.2
62	3.0000	.45000	41.000	.2930-01	.2440-01	.3560-01	.1275-02	.1039-02	.1389-02	.8490	9.702	942.8
62	3.0000	.47500	42.000	.2670-01	.2390-01	.3190-01	.1249-02	.1182-02	.1581-02	.9430	10.49	945.4
62	3.0000	.50000	43.000	.3260-01	.2710-01	.3630-01	.1421-02	.1182-02	.1581-02	.9430	10.49	945.4
62	3.0000	.52500	44.000	.3900-01	.3240-01	.4340-01	.1699-02	.1412-02	.1890-02	1.125	13.17	946.7
62	3.0000	.55000	45.000	.4630-01	.3850-01	.5150-01	.2016-02	.1675-02	.2244-02	1.330	14.78	948.7
62	3.0000	.60000	46.000	.7590-01	.6300-01	.8460-01	.3304-02	.2742-02	.3682-02	2.165	23.41	953.6
62	3.0000	.65000	47.000	.6430-01	.5330-01	.7160-01	.2800-02	.2323-02	.3120-02	1.833	19.34	954.1
62	3.0000	.70000	48.000	.3280-01	.2730-01	.3650-01	.1429-02	.1188-02	.1590-02	.9480	10.44	945.7
62	3.0000	.75000	49.000	.1870-01	.1560-01	.2080-01	.8145-03	.6777-03	.9060-03	.5420	5.889	943.6
62	3.0000	.80000	50.000	.1510-01	.1260-01	.1680-01	.6590-03	.5483-03	.7329-03	.4390	4.699	943.2
62	3.0000	.85000	51.000	.1140-01	.9500-02	.1270-01	.4985-03	.4145-03	.5548-03	.3300	4.082	946.4
62	3.0000	.87500	52.000	.3730-01	.3100-01	.4160-01	.1626-02	.1349-02	.1812-02	1.064	13.11	954.1
62	3.0000	.90000	53.000	.2240-01	.1860-01	.2490-01	.9750-03	.8095-03	.1085-02	.6400	8.884	951.7
62	3.0000	.92500	54.000	.2440-01	.2020-01	.2720-01	.1082-02	.8816-03	.1183-02	.6980	9.108	951.6
62	3.0000	.95000	55.000	.3260-01	.2710-01	.3630-01	.1420-02	.1179-02	.1581-02	.9330	9.409	951.7
62	4.0000	.20000	71.000	.4370-01	.3620-01	.4870-01	.1903-02	.1578-02	.2121-02	1.240	14.08	957.0
62	4.0000	.22500	72.000	.3330-01	.2770-01	.3710-01	.1452-02	.1206-02	.1616-02	.9560	11.17	950.2
62	4.0000	.25000	73.000	.2470-01	.2050-01	.2740-01	.1074-02	.8938-03	.1195-02	.7120	8.342	945.5
62	4.0000	.27500	74.000	.1930-01	.1610-01	.2150-01	.8414-03	.6999-03	.9360-03	.5590	6.917	944.4
62	4.0000	.30000	75.000	.1720-01	.1440-01	.1920-01	.7508-03	.6251-03	.8348-03	.5010	6.381	940.3
62	4.0000	.32500	57.000	.1820-01	.1520-01	.2020-01	.7928-03	.6500-03	.8815-03	.5290	6.944	941.3
62	4.0000	.35000	58.000	.2670-01	.2220-01	.2970-01	.1161-02	.9662-03	.1291-02	.7730	10.13	943.3
62	4.0000	.37500	59.000	.3660-01	.3040-01	.4070-01	.1594-02	.1326-02	.1774-02	1.057	13.85	945.5
62	4.0000	.40000	60.000	.4680-01	.3890-01	.5210-01	.2040-02	.1695-02	.2270-02	1.347	17.62	948.1
62	4.0000	.42500	61.000	.5580-01	.4640-01	.6220-01	.2430-02	.2019-02	.2706-02	1.600	20.91	950.3

(RVB003)

OH-74 (AEDC V418-B6A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V418-B6A) B02C12F10H16M127E52V8R19

RUN NUMBER	TRA:E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM1 BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DT140T DEG. R /SEC	TM DEG. R
62	4.0000	.45000	62.000	.7220-01	.5990-01	.8050-01	.3144-02	.2609-02	.3504-02	2.056	26.48	554.9
62	4.0000	.47500	63.000	.8550-01	.7080-01	.9550-01	.3724-02	.3083-02	.4157-02	2.404	30.31	563.2
62	4.0000	.50000	64.000	.7370-01	.6100-01	.8220-01	.3208-02	.2657-02	.3579-02	2.078	25.51	560.8
62	4.0000	.52500	65.000	.5490-01	.4550-01	.6120-01	.2390-02	.1983-02	.2663-02	1.564	19.26	554.2
62	4.0000	.55000	66.000	.3840-01	.3190-01	.4270-01	.1670-02	.1388-02	.1860-02	1.102	12.89	548.9
62	4.0000	.60000	67.000	.1970-01	.1640-01	.2190-01	.8558-03	.7120-03	.9521-03	.5690	6.399	544.2
62	4.0000	.65000	68.000	.1480-01	.1230-01	.1650-01	.6441-03	.5359-03	.7163-03	.4290	5.028	543.2
62	4.0000	.70000	69.000	.1050-01	.8700-02	.1170-01	.4564-03	.3798-03	.5075-03	.3040	3.387	541.5
62	4.0000	.75000	70.000	.9500-02	.7900-02	.1060-01	.4142-03	.3448-03	.4606-03	.2760	3.082	542.2
62	4.0000	.80000	75.000	.4200-02	.3500-02	.4700-02	.1839-03	.1530-03	.2045-03	.1230	1.477	542.2
62	4.0000	.85000	76.000	.6000-02	.5000-02	.6700-02	.2625-03	.2184-03	.2920-03	.1750	2.070	543.4
62	4.0000	.87500	77.000	.4800-02	.4000-02	.5400-02	.2112-03	.1757-03	.2349-03	.1400	1.840	543.9
62	4.0000	.90000	78.000	.8100-02	.6700-02	.9000-02	.3530-03	.2936-03	.3927-03	.2340	3.033	544.9
62	4.0000	.92500	79.000	.1540-01	.1280-01	.1710-01	.6700-03	.5568-03	.7458-03	.4430	5.469	547.9
62	4.0000	.95000	80.000	.8800-02	.7300-02	.9800-02	.3830-03	.3184-03	.4262-03	.2540	2.968	546.8

04-74 (AFDC V41B-68A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

04-74 (AEDC V418-88A) B62C12F10H16W127E32V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

ETA = 2.000 MACH = 0.000 ELEVON = .0000 RUDDER = .0000

FLUDER •

.0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	HU LB-SEC /FT ²
1	0.8	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
2	0.9	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
3	1.0	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
4	1.1	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
5	1.2	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
6	1.3	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
7	1.4	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
8	1.5	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
9	1.6	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
10	1.7	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
11	1.8	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
12	1.9	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
13	2.0	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
14	2.1	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
15	2.2	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
16	2.3	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
17	2.4	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
18	2.5	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
19	2.6	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
20	2.7	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
21	2.8	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
22	2.9	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
23	3.0	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
24	3.1	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
25	3.2	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
26	3.3	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
27	3.4	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
28	3.5	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
29	3.6	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
30	3.7	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
31	3.8	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
32	3.9	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
33	4.0	0	1.0	0	0	0	0	1.0	0	100	0.0023	0.0001
34	4.1	0	1.0	0	0	0						

RUN NUMBER	RM/L X10 6 /FT	WREF BTU/ R FT2SEC	STN NO R= .0175 .2347-01
63	2.947	.4358-01	

..TEST DATA..

RUN NUMBER	TRACE	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R-TAN	H(9TO) BTU/ R FT2SEC	H(1TO) BTU/ R FT2SEC	H(1TAN) BTU/ R FT2SEC	QDDY	BTU/ R FT2SEC	DEC. R /SEC	TM
63	1.0000	.27500	1.0000	.1740-01	.1440-01	.1930-01	.7554-03	.6291-03	.8415-03	.5020	5.203	545.3	
63	1.0000	.30000	2.0000	.1430-01	.1190-01	.1590-01	.6235-03	.5187-03	.6937-03	.4140	4.395	544.9	
63	1.0000	.32500	3.0000	.1210-01	.1010-01	.1350-01	.5270-03	.4384-03	.5962-03	.3510	3.599	544.4	
63	1.0000	.35000	4.0000	.1350-01	.1130-01	.1500-01	.5896-03	.4905-03	.6958-03	.3920	4.066	544.0	
63	1.0000	.37500	5.0000	.1230-01	.1020-01	.1360-01	.5339-03	.4441-03	.5940-03	.3950	3.728	544.9	
63	1.0000	.40000	6.0000	.1980-01	.1660-01	.2220-01	.6887-03	.7224-03	.9666-03	.5760	5.911	546.2	
63	1.0000	.42500	7.0000	.1980-01	.1640-01	.2200-01	.6610-03	.7158-03	.9582-03	.5710	5.904	546.9	
63	1.0000	.45000	8.0000	.2300-01	.1910-01	.2560-01	.1001-02	.8318-03	.1114-02	.6830	6.781	547.3	
63	1.0000	.47500	9.0000	.1880-01	.1570-01	.2100-01	.6212-03	.6876-03	.9139-03	.5440	5.522	547.4	
63	1.0000	.50000	10.000	.2120-01	.1760-01	.2360-01	.9237-03	.7678-03	.1028-02	.6110	6.181	547.6	
63	1.0000	.52500	11.000	.2900-01	.2410-01	.3230-01	.1269-02	.1051-02	.1408-02	.8350	8.436	549.3	
63	1.0000	.55000	12.000	.3060-01	.2540-01	.3400-01	.1332-02	.1107-02	.1483-02	.8800	8.808	549.0	
63	1.0000	.60000	13.000	.4800-01	.3980-01	.5350-01	.2091-02	.1735-02	.2330-02	1.368	13.78	555.2	
63	1.0000	.65000	14.000	.5360-01	.4440-01	.5970-01	.2335-02	.1937-02	.2603-02	1.827	15.37	555.8	
63	1.0000	.70000	15.000	.4350-01	.3610-01	.4650-01	.1898-02	.1573-02	.2113-02	1.241	12.06	554.8	
63	1.0000	.75000	16.000	.2830-01	.2350-01	.3160-01	.1235-02	.1025-02	.1376-02	.8120	8.195	551.8	
63	1.0000	.80000	17.000	.2270-01	.1880-01	.2530-01	.9880-03	.8203-03	.1101-02	.6490	6.262	552.5	
63	1.0000	.85000	18.000	.1620-01	.1350-01	.1810-01	.7074-03	.5883-03	.7871-03	.4690	5.500	545.9	
63	1.0000	.90000	19.000	.1570-01	.1310-01	.1750-01	.6843-03	.5681-03	.7813-03	.4950	5.354	545.4	
63	2.0000	.33700	20.000	.1570-01	.1310-01	.1750-01	.1188-02	.9871-03	.1322-02	.7860	9.246	547.8	
63	2.0000	.39000	21.000	.2720-01	.2260-01	.3030-01	.1188-02	.9871-03	.1322-02	.7860	9.246	547.8	
63	2.0000	.42600	22.000	.3180-01	.2640-01	.3540-01	.1387-02	.1152-02	.1544-02	.9140	10.69	550.2	
63	2.0000	.47800	23.000	.3860-01	.3210-01	.4300-01	.1683-02	.1398-02	.1874-02	1.108	12.29	551.4	

(RV8003)

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

04-74 (AEDC V418-B8A) B8C1271016M127E52V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R-TAW	H1GTO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TM DEG. R
63	2.0000	.53000	23.000	.5790-01	.4800-01	.6460-01	.2525-02	.2094-02	.2815-02	1.547	18.22	557.5
63	2.0000	.56700	24.000	.5480-01	.4540-01	.6110-01	.2398-02	.1980-02	.2663-02	1.559	16.83	556.9
63	2.0000	.62000	25.000	.2820-01	.2340-01	.3140-01	.1229-02	.1021-02	.1368-02	1.810	8.782	549.9
63	2.0000	.67000	26.000	.1950-01	.1620-01	.2170-01	.8494-03	.7057-03	.9456-03	.5610	6.079	549.3
63	2.0000	.70500	27.000	.1480-01	.1230-01	.1840-01	.6344-03	.5344-03	.7157-03	.4250	4.566	548.3
63	2.0000	.75000	28.000	.1250-01	.1040-01	.1390-01	.5440-03	.4522-03	.6055-03	.3600	3.947	547.4
63	2.0000	.80000	29.000	.1070-01	.8900-02	.1180-01	.4660-03	.3873-03	.5186-03	.3080	3.398	547.7
63	2.0000	.82400	30.000	.3100-02	.2600-02	.3500-02	.1355-03	.1125-03	.1508-03	.8900-01	1.243	549.1
63	2.0000	.20000	31.000	.3620-01	.3000-01	.4030-01	.1577-02	.1308-02	.1758-02	1.029	10.84	557.3
63	3.0000	.22500	32.000	.3060-01	.2540-01	.3410-01	.1335-02	.1108-02	.1488-02	.8760	9.753	554.0
63	3.0000	.25100	33.000	.2320-01	.1930-01	.2590-01	.1013-02	.8412-03	.1127-02	.6680	7.456	549.9
63	2.7500	.30000	34.000	.1820-01	.1510-01	.2020-01	.7915-03	.6580-03	.8807-03	.5250	6.275	546.7
63	3.0000	.30000	35.000	.1670-01	.1390-01	.1850-01	.7259-03	.6037-03	.8076-03	.4820	5.963	545.5
63	3.0000	.32500	36.000	.1670-01	.1390-01	.1850-01	.7259-03	.6037-03	.8076-03	.4820	5.678	545.0
63	3.0000	.35000	37.000	.2600-01	.2160-01	.2890-01	.1133-02	.9416-03	.1260-02	.7510	8.696	546.9
63	3.0000	.40000	38.000	.3380-01	.2810-01	.3760-01	.1472-02	.1223-02	.1638-02	.9720	11.37	549.0
63	4.2500	.45000	39.000	.4020-01	.3340-01	.4480-01	.1753-02	.1456-02	.1952-02	1.156	13.58	550.6
63	4.7500	.50000	40.000	.3840-01	.3180-01	.4270-01	.1672-02	.1398-02	.1862-02	1.099	12.96	552.5
63	3.0000	.50000	41.000	.5660-01	.4700-01	.6310-01	.2467-02	.2047-02	.2749-02	1.616	18.37	554.6
63	3.0000	.52500	42.000	.5600-01	.4650-01	.6250-01	.2442-02	.2025-02	.2722-02	1.595	17.65	556.6
63	3.0000	.55000	43.000	.4080-01	.3390-01	.4550-01	.1780-02	.1477-02	.1982-02	1.170	12.97	552.4
63	3.0000	.55000	44.000	.2800-01	.2320-01	.3110-01	.1219-02	.1013-02	.1357-02	.8060	9.423	548.6
63	3.0000	.60000	45.000	.2190-01	.1820-01	.2440-01	.9555-03	.7949-03	.1065-02	.6320	7.028	548.5
63	3.0000	.65000	46.000	.1240-01	.1030-01	.1380-01	.5411-03	.4500-03	.6022-03	.3590	3.895	546.4
63	3.0000	.70000	47.000	.7000-02	.5900-02	.7800-02	.3067-03	.2550-03	.3412-03	.2040	2.158	545.7
63	3.0000	.75000	48.000	.5600-02	.4700-02	.6300-02	.2451-03	.2039-03	.2727-03	.1630	1.794	545.5
63	3.0000	.80000	49.000	.5900-02	.4900-02	.5600-02	.2570-03	.2138-03	.2859-03	.1710	1.854	545.2
63	3.0000	.85000	50.000	.3600-02	.3000-02	.4000-02	.1570-03	.1306-03	.1747-03	.1040	1.116	545.5
63	3.0000	.87500	51.000	.6700-02	.5500-02	.7400-02	.2902-03	.2410-03	.3423-03	.1910	2.360	550.5
63	3.0000	.90000	52.000	.7100-02	.5900-02	.7900-02	.3074-03	.2552-03	.3423-03	.2020	2.495	551.2
63	3.0000	.92500	53.000	.7500-02	.6200-02	.8300-02	.3249-03	.2697-03	.3619-03	.2140	2.962	552.2
63	3.0000	.95000	54.000	.1400-01	.8600-02	.1160-01	.4524-03	.3756-03	.5039-03	.2970	3.881	552.3
63	3.0000	.20000	55.000	.4170-01	.9500-02	.1270-01	.4977-03	.4134-03	.5541-03	.3280	3.315	549.9
63	4.0000	.22500	56.000	.3200-01	.2660-01	.3570-01	.1819-02	.1576-02	.2031-02	1.175	13.29	563.9
63	4.0000	.25000	57.000	.2530-01	.2100-01	.2810-01	.1101-02	.9139-03	.1226-02	.9110	10.61	557.0
63	4.0000	.27500	58.000	.2380-01	.1980-01	.2660-01	.1039-02	.8632-03	.1157-02	.7230	8.441	552.8
63	4.0000	.30000	59.000	.2330-01	.1940-01	.2590-01	.1016-02	.8439-03	.1157-02	.6850	8.445	550.8
63	4.0000	.32500	60.000	.3350-01	.2880-01	.4400-01	.1016-02	.8439-03	.1157-02	1.128	14.71	554.3
63	4.0000	.35000	61.000	.5750-01	.4770-01	.6420-01	.2507-02	.2077-02	.2797-02	1.628	21.16	560.4
63	4.0000	.37500	62.000	.4480-01	.3710-01	.4990-01	.1951-02	.1619-02	.2174-02	1.277	16.64	555.1
63	4.0000	.40000	63.000	.2920-01	.2420-01	.3250-01	.1272-02	.1057-02	.1417-02	.8380	10.95	550.9
63	4.0000	.42500	64.000	.2220-01	.1850-01	.2480-01	.9692-03	.8053-03	.1079-02	.6400	8.369	549.0

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75		ON-7N (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE										PAGE 270	
		ON-7N (AEDC V418-88A) B62C12F10H16W127E52V6R19										(R:0003)	
RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R F12SEC	H1T0 BTU/ R F12SEC	H1TAN BTU/ R F12SEC	QDOT BTU/ F12SEC	DTNOT DEG. R /SEC	TH DEG. R	
63	4.0000	.45000	62.000	.1470-01	.1220-01	.1640-01	.6412-03	.5130-03	.7136-03	.4250	5.490	547.4	
63	4.0000	.47500	63.000	.1040-01	.0800-02	.1160-01	.4525-03	.3762-03	.5035-03	.3000	3.813	546.8	
63	4.0000	.50000	64.000	.7500-02	.6300-02	.8400-02	.3288-03	.2735-03	.3658-03	.2180	2.701	545.4	
63	4.0000	.52500	65.000	.6200-02	.5200-02	.6900-02	.2720-03	.2282-03	.3026-03	.1810	2.235	545.2	
63	4.0000	.55000	66.000	.5700-02	.4700-02	.6300-02	.2477-03	.2060-03	.2755-03	.1650	1.929	544.9	
63	4.0000	.60000	67.000	.3600-02	.3000-02	.4000-02	.1568-03	.1304-03	.1744-03	.1040	1.175	543.6	
63	4.0000	.65000	68.000	.2500-02	.2100-02	.2700-02	.1075-03	.8947-04	.1196-03	.7200-01	.8390	544.0	
63	4.0000	.70000	69.000	.1300-02	.1100-02	.1500-02	.5814-04	.4837-04	.6466-04	.3900-01	.4310	543.6	
63	4.0000	.75000	70.000	.1500-02	.1200-02	.1700-02	.6515-04	.5421-04	.7248-04	.4300-01	.4840	543.6	
63	4.0000	.80000	75.000	.1300-02	.1100-02	.1400-02	.5676-04	.4722-04	.6314-04	.3800-01	.4250	544.3	
63	4.0000	.85000	76.000	.2300-02	.1900-02	.2600-02	.1017-03	.8456-04	.1132-03	.6700-01	.7980	546.3	
63	4.0000	.87500	77.000	.3300-02	.2800-02	.3700-02	.1444-03	.1201-03	.1607-03	.9600-01	1.253	546.5	
63	4.0000	.90000	78.000	.4100-02	.3400-02	.4600-02	.1788-03	.1486-03	.1990-03	.1180	1.532	547.1	
63	4.0000	.92500	79.000	.4900-02	.4100-02	.5500-02	.2147-03	.1784-03	.2389-03	.1420	1.755	547.9	
63	4.0000	.95000	80.000	.5000-02	.4200-02	.5600-02	.2196-03	.1826-03	.2444-03	.1450	1.702	547.4	

(RV8003)

OH-74 (AEDC V41B-88A) 882C12F10H16H127E52V8R18

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
97	8.000	19.82	808.4	1351.	-168.6	2.000	97.90	.8300-01	3.710	3879.	.7096-04	.7882-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R= .0175 .2157-01
97	3.452	.4762-01	

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1GTO BTU/ R FT2SEC	H1TO1 BTU/ R FT2SEC	H1TAM1 BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTMOT DEG. R /SEC	TM DEG. R
97	1.0000	.27500	1.0000	.1820-01	.1350-01	.1810-01	.7723-03	.6417-03	.8599-03	.5120	5.288	552.4
97	1.0000	.30000	2.0000	.1390-01	.1150-01	.1550-01	.6616-03	.5498-03	.7365-03	.4390	4.644	551.6
97	1.0000	.32500	3.0000	.1170-01	.0700-02	.1300-01	.5566-03	.4627-03	.6196-03	.3700	3.788	550.8
97	1.0000	.35000	4.0000	.1160-01	.0600-02	.1290-01	.5519-03	.4587-03	.6143-03	.3670	3.791	550.8
97	1.0000	.37500	5.0000	.1120-01	.0300-02	.1240-01	.5326-03	.4427-03	.5928-03	.3540	3.711	550.6
97	1.0000	.40000	6.0000	.1360-01	.1130-01	.1510-01	.6476-03	.5382-03	.7208-03	.4310	4.407	550.8
97	1.0000	.42500	7.0000	.1370-01	.1140-01	.1520-01	.6519-03	.5417-03	.7257-03	.4330	4.471	551.5
97	1.0000	.45000	8.0000	.1480-01	.1230-01	.1650-01	.7040-03	.5850-03	.7837-03	.4670	4.758	551.9
97	1.0000	.47500	9.0000	.2100-01	.1750-01	.2340-01	.1002-02	.8325-03	.1050-02	.6840	6.722	553.4
97	1.0000	.50007	10.000	.1980-01	.1650-01	.2200-01	.9430-03	.7834-03	.1050-02	.6250	6.303	552.9
97	1.0000	.52500	11.000	.1980-01	.1650-01	.2210-01	.9444-03	.7845-03	.1052-02	.6260	6.313	552.9
97	1.0000	.55000	12.000	.1820-01	.1510-01	.2030-01	.8674-03	.7207-03	.9657-03	.5760	5.752	552.3
97	1.0000	.60000	13.000	.2250-01	.1870-01	.2510-01	.1073-02	.8906-03	.1195-02	.7090	7.144	554.6
97	1.0000	.65000	14.000	.2850-01	.2370-01	.3180-01	.1359-02	.1129-02	.1514-02	.8990	9.055	554.5
97	1.0000	.70000	15.000	.3470-01	.2880-01	.3870-01	.1653-02	.1373-02	.1842-02	1.092	10.60	555.7
97	1.0000	.75000	16.000	.2960-01	.2460-01	.3290-01	.1408-02	.1169-02	.1569-02	.9300	9.369	555.2
97	1.0000	.80000	17.000	.3830-01	.3180-01	.4270-01	.1825-02	.1514-02	.2034-02	1.202	11.57	557.2
97	1.0000	.85000	18.000	.1470-01	.1220-01	.1630-01	.6983-03	.5800-03	.7776-03	.4630	5.399	553.4
97	1.0000	.33700	19.000	.1270-01	.1060-01	.1410-01	.6050-03	.5027-03	.6735-03	.4020	4.717	551.9
97	2.0000	.39000	20.000	.1950-01	.1290-01	.1730-01	.7400-03	.6148-03	.8238-03	.4910	5.766	552.2
97	2.0000	.42600	21.000	.1950-01	.1620-01	.2170-01	.9268-03	.7698-03	.1032-02	.6140	7.163	553.6
97	2.0000	.47800	22.000	.2350-01	.1950-01	.2610-01	.1118-02	.9286-03	.1245-02	.7410	8.209	553.6

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 273

(RV8003)

OH-74 (AEDC V41B-88A) B62C12F10H18M127E52VR19

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(IGT) BTU/ R FT2SEC	H(ITO) BTU/ R FT2SEC	HITAM) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
97	4.0000	.45000	62.000	.7380-01	.6110-01	.8240-01	.3516-02	.2911-02	.3825-02	2.283	29.23	566.7
97	4.0000	.47500	63.000	.8780-01	.7250-01	.9820-01	.4182-03	.3454-02	.4674-02	2.681	33.61	574.7
97	4.0000	.50000	64.000	.7340-01	.6060-01	.8190-01	.3493-02	.2888-02	.3502-02	2.252	27.49	571.3
97	4.0000	.52500	65.000	.5170-01	.4290-01	.5770-01	.2464-02	.2041-02	.2749-02	1.606	19.67	564.2
97	4.0000	.55000	66.000	.3840-01	.3180-01	.4280-01	.1828-02	.1516-02	.2037-02	1.201	13.98	558.7
97	4.0000	.60000	67.000	.1880-01	.1560-01	.2100-01	.8985-03	.7446-03	.9863-03	.5940	6.847	553.7
97	4.0000	.65000	68.000	.1260-01	.1040-01	.1400-01	.5989-03	.4976-03	.6667-03	.3980	4.842	552.1
97	4.0000	.70000	69.000	.1030-01	.8500-02	.1140-01	.4886-03	.4061-03	.5439-03	.3250	3.608	550.8
97	4.0000	.75000	70.000	.9200-02	.7600-02	.1020-01	.4357-03	.3621-03	.4850-03	.2900	3.213	551.5
97	4.0000	.80000	75.000	.4300-02	.3600-02	.4800-02	.2037-03	.1682-03	.2268-03	.1350	1.622	552.1
97	4.0000	.85000	76.000	.5000-02	.4100-02	.5500-02	.2358-03	.1959-03	.2625-03	.1560	1.846	552.3
97	4.0000	.87500	77.000	.5100-02	.4200-02	.5700-02	.2419-03	.2009-03	.2693-03	.1600	2.088	553.8
97	4.0000	.90000	78.000	.6800-02	.5700-02	.7600-02	.3254-03	.2702-03	.3625-03	.2150	2.770	555.1
97	4.0000	.92500	79.000	.1280-01	.1060-01	.1420-01	.6090-03	.5054-03	.6785-03	.4020	4.938	556.6
97	4.0000	.95000	80.000	.1020-01	.8500-02	.1140-01	.4852-03	.4027-03	.5407-03	.3200	3.725	556.9

DATE 07 OCT 75

OH-7A (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 274

OH-7A (AEDC V41B-88A) B62C12F10M16M127E52V8R19

(RV8003)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
98	8.000	29.83	807.9	1350.	-89.98	2.000	97.80	8300-01	3.707	3877.	.7097-04	.7876-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175
98	3.494	.4760-01	.2157-01

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1G10 BTU/ R FT ² SEC	H1T0 BTU/ R FT ² SEC	H(TAN) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTMDT DEG. R /SEC	TM DEG. R
98	1.0000	.27500	1.0000	.1770-01	.1470-01	.1980-01	.8444-03	.7010-03	.9408-03	.5570	5.743	555.0
98	1.0000	.30000	2.0000	.1490-01	.1240-01	.1660-01	.7100-03	.5895-03	.7907-03	.4690	4.950	554.3
98	1.0000	.32500	3.0000	.1350-01	.1120-01	.1500-01	.6414-03	.5327-03	.7143-03	.4240	4.337	553.3
98	1.0000	.35000	4.0000	.1480-01	.1230-01	.1650-01	.7068-03	.5869-03	.7872-03	.4670	4.818	553.9
98	1.0000	.37500	5.0000	.1340-01	.1110-01	.1490-01	.6383-03	.5301-03	.7108-03	.4220	4.418	553.3
98	1.0000	.40000	6.0000	.2030-01	.1690-01	.2270-01	.9681-03	.8037-03	.1078-02	.6390	6.520	555.3
98	1.0000	.42500	7.0000	.1950-01	.1620-01	.2180-01	.9293-03	.7714-03	.1035-02	.6130	6.311	555.8
98	1.0000	.45000	8.0000	.2270-01	.1890-01	.2530-01	.1083-02	.8964-03	.1206-02	.7130	7.235	556.9
98	1.0000	.47500	9.0000	.2000-01	.1660-01	.2230-01	.9633-03	.7912-03	.1062-02	.6280	6.350	556.2
98	1.0000	.50000	10.000	.2180-01	.1810-01	.2430-01	.1038-02	.8618-03	.1157-02	.6840	6.885	556.2
98	1.0000	.52500	11.000	.2900-01	.2410-01	.3230-01	.1380-02	.1145-02	.1538-02	.9070	9.120	557.9
98	1.0000	.55000	12.000	.2860-01	.2370-01	.3190-01	.1362-02	.1130-02	.1518-02	.8960	8.930	557.4
98	1.0000	.58000	13.000	.4360-01	.3610-01	.4860-01	.2076-02	.1720-02	.2316-02	1.354	13.59	562.6
98	1.0000	.60000	14.000	.6690-01	.5540-01	.7460-01	.3183-02	.2635-02	.3552-02	2.067	20.70	565.7
98	1.0000	.65000	15.000	.6300-01	.5220-01	.7030-01	.2999-02	.2482-02	.3347-02	1.946	18.80	565.2
98	1.0000	.70000	16.000	.4730-01	.3920-01	.5280-01	.2253-02	.1867-02	.2513-02	1.471	14.76	562.2
98	1.0000	.75000	17.000	.3210-01	.2660-01	.3580-01	.1527-02	.1265-02	.1703-02	.9970	9.974	561.9
98	1.0000	.80000	18.000	.1780-01	.1480-01	.1980-01	.8464-03	.7024-03	.9430-03	.5570	6.495	556.4
98	2.0000	.28500	19.000	.1630-01	.1350-01	.1810-01	.7736-03	.6422-03	.8618-03	.5110	5.985	555.0
98	2.0000	.33700	20.000	.2800-01	.2320-01	.3120-01	.1332-02	.1105-02	.1484-02	.8760	10.26	557.1
98	2.0000	.39000	21.000	.3200-01	.2650-01	.3570-01	.1523-02	.1263-02	.1698-02	.9980	11.61	559.5
98	2.0000	.42600	22.000	.3620-01	.3000-01	.4040-01	.1723-02	.1429-02	.1921-02	1.129	12.48	559.7

(RV8003)

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

04-74 (AEDC V418-B8A) 862C12F10M16H127E52V8R19

DATE 07 OCT 75

RUN NUMBER	TRA'E	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R-TAH	H(170) BTU/ R FT2SEC	H(170) BTU/ R FT2SEC	H(170) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
98	2.0000	.53000	23.000	.6220-01	.5140-01	.6940-01	.2959-02	.2448-02	.3302-02	1.917	21.11	566.9
98	2.0000	.56700	24.000	.7030-01	.5810-01	.7850-01	.3347-02	.2768-02	.3738-02	2.159	23.16	569.9
98	2.0000	.62000	25.000	.4450-01	.3690-01	.4960-01	.2117-02	.1754-02	.2362-02	1.380	14.85	563.3
98	2.0000	.67000	26.000	.2690-01	.2230-01	.2990-01	.1278-02	.1060-02	.1425-02	.8390	9.043	559.2
98	2.0000	.70500	27.000	.1940-01	.1610-01	.2160-01	.9230-03	.7657-03	.1029-02	.6070	6.485	557.6
98	2.0000	.75000	28.000	.1540-01	.1270-01	.1710-01	.7310-03	.6068-03	.8144-03	.4820	5.258	555.7
98	2.0000	.80000	29.000	.1340-01	.1110-01	.1490-01	.6379-03	.5294-03	.7108-03	.4200	4.604	556.5
98	2.0000	.82400	30.000	.4100-02	.3400-02	.4500-02	.1940-03	.1609-03	.2162-03	.1270	1.761	558.3
98	3.0000	.20000	31.000	.3620-01	.2990-01	.3440-01	.1723-02	.1425-02	.1923-02	1.114	11.67	568.4
98	3.0000	.22500	32.000	.3080-01	.2550-01	.2990-01	.1468-02	.1215-02	.1638-02	.9540	10.57	564.9
98	3.0000	.25000	33.000	.2410-01	.2000-01	.2590-01	.1149-02	.9529-03	.1281-02	.7530	8.360	560.0
98	3.0000	.27500	34.000	.1890-01	.1570-01	.2100-01	.8979-03	.7450-03	.1001-02	.5900	7.025	557.4
98	3.0000	.30000	35.000	.1800-01	.1490-01	.2000-01	.8957-03	.7102-03	.9534-03	.5640	6.937	556.0
98	3.0000	.32500	36.000	.1700-01	.1410-01	.1890-01	.8092-03	.6717-03	.9014-03	.5340	6.223	555.3
98	3.0000	.35000	37.000	.2750-01	.2280-01	.3070-01	.1310-02	.1087-02	.1455-02	.8610	9.928	557.3
98	3.0000	.37500	38.000	.3380-01	.2720-01	.3650-01	.1560-02	.1294-02	.1739-02	1.024	11.92	558.8
98	3.0000	.40000	39.000	.4100-01	.3400-01	.4570-01	.1952-02	.1619-02	.2177-02	1.278	14.95	560.2
98	3.0000	.42500	40.000	.3700-01	.3070-01	.4130-01	.1762-02	.1460-02	.1966-02	1.150	13.50	562.5
98	3.0000	.45000	41.000	.5600-01	.4640-01	.6250-01	.2666-02	.2208-02	.2975-02	1.736	19.64	563.7
98	3.0000	.47500	42.000	.6550-01	.5420-01	.7320-01	.3119-02	.2580-02	.3882-02	2.016	22.17	564.5
98	3.0000	.50000	43.000	.5380-01	.4450-01	.6000-01	.2559-02	.2119-02	.2855-02	1.664	18.35	564.5
98	3.0000	.52500	44.000	.3630-01	.3010-01	.4050-01	.1728-02	.1433-02	.1927-02	1.132	13.16	560.1
98	3.0000	.55000	45.000	.2730-01	.2260-01	.3040-01	.1298-02	.1077-02	.1447-02	.8520	9.425	558.6
98	3.0000	.57500	46.000	.1500-01	.1250-01	.1670-01	.7155-03	.5939-03	.7972-03	.4720	5.094	555.9
98	3.0000	.60000	47.000	.9300-02	.7700-02	.1040-01	.4432-03	.3680-03	.4937-03	.2930	3.088	554.7
98	3.0000	.65000	48.000	.6900-02	.5700-02	.7900-02	.3273-03	.2718-03	.3645-03	.2160	2.375	553.7
98	3.0000	.70000	49.000	.7100-02	.5900-02	.7900-02	.3360-03	.2790-03	.3742-03	.2220	2.404	553.5
98	3.0000	.75000	50.000	.5200-02	.4300-02	.5800-02	.2462-03	.2044-03	.2742-03	.1630	1.733	554.4
98	3.0000	.80000	51.000	.8600-02	.7100-02	.9500-02	.4073-03	.3377-03	.4540-03	.2670	3.277	559.7
98	3.0000	.85000	52.000	.8500-02	.7100-02	.9500-02	.4061-03	.3367-03	.4528-03	.2660	3.262	560.6
98	3.0000	.87500	53.000	.1180-01	.9800-02	.1320-01	.5639-03	.4673-03	.6289-03	.3680	5.082	561.9
98	3.0000	.90000	54.000	.1670-01	.1380-01	.1860-01	.7953-03	.6909-03	.8870-03	.5190	6.739	562.4
98	3.0000	.92500	55.000	.1820-01	.1510-01	.2030-01	.8659-03	.7179-03	.9654-03	.5670	5.697	560.0
98	3.0000	.95000	56.000	.4490-01	.3700-01	.5020-01	.2137-02	.1763-02	.2390-02	1.362	15.30	577.6
98	4.0000	.20000	72.000	.3270-01	.2700-01	.3650-01	.1555-02	.1285-02	.1737-02	1.001	11.58	571.2
98	4.0000	.25000	73.000	.2630-01	.2180-01	.2940-01	.1253-02	.1037-02	.1399-02	.8130	9.422	566.6
98	4.0000	.27500	74.000	.2430-01	.2010-01	.2710-01	.1156-02	.9571-03	.1290-02	.7520	9.205	564.8
98	4.0000	.30000	75.000	.2270-01	.1880-01	.2530-01	.1082-02	.8972-03	.1277-02	.7080	9.209	560.3
98	4.0000	.32500	76.000	.4040-01	.3350-01	.4510-01	.1924-02	.1593-02	.2147-02	1.249	16.19	565.7
98	4.0000	.35000	77.000	.5960-01	.4930-01	.6660-01	.2838-02	.2345-02	.3171-02	1.824	23.57	572.4
98	4.0000	.37500	78.000	.4810-01	.3980-01	.5370-01	.2292-02	.1897-02	.2558-02	1.465	19.24	566.9
98	4.0000	.40000	79.000	.3280-01	.2720-01	.3660-01	.1563-02	.1294-02	.1743-02	1.018	13.21	563.4
98	4.0000	.42500	81.000	.2660-01	.2210-01	.2970-01	.1267-02	.1050-02	.1413-02	.8290	10.77	561.2

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 276

OH-74 (AEDC V41B-88A) B6RC12F10H16H127E52V8R19

(RV6003)

RUN NUMBER	TRACE	X/L	T/C NO	W/HREF R=0.9	W/HREF R=1.0	W/HREF R=TAN	H(9T) BTU/ R F12SEC	H(10) BTU/ R F12SEC	H(TAN) BTU/ R F12SEC	QDOT BTU/ F12SEC	OTDOT DEG. R /SEC	TH DEG. R
98	4.0000	.45000	62.000	.1690-01	.1400-01	.1880-01	.8035-03	.6563-03	.8957-03	.5270	6.773	559.2
98	4.0000	.47500	63.000	.1180-01	.9760-02	.1310-01	.5594-03	.4840-03	.6234-03	.3680	4.646	557.9
98	4.0000	.50000	64.000	.8300-02	.8900-02	.9300-02	.3966-03	.3291-03	.4419-03	.2610	3.212	556.5
98	4.0000	.52500	65.000	.7000-02	.5900-02	.7700-02	.3309-03	.2747-03	.3687-03	.2180	2.684	555.8
98	4.0000	.55000	66.000	.6000-02	.5000-02	.6700-02	.2953-03	.2369-03	.3178-03	.1880	2.196	555.0
98	4.0000	.60000	67.000	.4300-02	.3600-02	.4800-02	.2097-03	.1708-03	.2291-03	.1360	1.523	553.7
98	4.0000	.65000	68.000	.3300-02	.2700-02	.3700-02	.1570-03	.1304-03	.1748-03	.1040	1.213	553.2
98	4.0000	.70000	69.000	.2400-02	.2000-02	.2700-02	.1165-03	.9679-04	.1298-03	.7700-01	.8560	552.9
98	4.0000	.75000	70.000	.1900-02	.1300-02	.2100-02	.8992-04	.7470-04	.1001-03	.6000-01	.6610	552.3
98	4.0000	.80000	75.000	.2700-02	.2000-02	.3000-02	.1264-03	.1050-03	.1408-03	.8400-01	1.002	553.5
98	4.0000	.85000	76.000	.4500-02	.3600-02	.5100-02	.2164-03	.1786-03	.2410-03	.1430	1.683	554.9
98	4.0000	.87500	77.000	.5400-02	.4400-02	.6000-02	.2552-03	.2118-03	.2943-03	.1680	2.187	556.8
98	4.0000	.90000	78.000	.5700-02	.4700-02	.6400-02	.2716-03	.2253-03	.3027-03	.1780	2.296	557.8
98	4.0000	.92500	79.000	.6300-02	.5200-02	.7000-02	.3006-03	.2494-03	.3351-03	.1980	2.428	557.9
98	4.0000	.95000	80.000	.6500-02	.5400-02	.7200-02	.3087-03	.2561-03	.3441-03	.2030	2.360	558.3

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

OH-7N (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 277

OH-7N (AEDC V418-B8A) 802C12F10H16M127E52VBR19

(IRV8003)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = 2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	HEU LB-SEC /FT ²
7N	8.000	19.86	864.3	134.7	166.7	-2.300	97.60	.8900-01	3.966	3873.	.7810-04	.7858-07

RUN NUMBER	RM/L X10 ⁶ /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175
7N	3.750	.4921-01	.2083-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	W/HREF R=0.9	W/HREF R=1.0	W/HREF R=TAN	H19T01 BTU/ R FT ² SEC	H1T01 BTU/ R FT ² SEC	H1TAM BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTMDT DEG. R /SEC	TH DEG. R
7N	1.0000	.27500	1.0000	.9600-02	.8000-02	.1070-01	.4718-03	.3928-03	.5246-03	.3160	3.275	542.9
7N	1.0000	.30000	2.0000	.8700-02	.7200-02	.9700-02	.4283-03	.3566-03	.4762-03	.2870	3.045	542.6
7N	1.0000	.32500	3.0000	.7500-02	.6200-02	.8300-02	.3657-03	.3054-03	.4077-03	.2460	2.525	542.3
7N	1.0000	.35000	4.0000	.8000-02	.6700-02	.8900-02	.1933-03	.3275-03	.4372-03	.2840	2.736	541.7
7N	1.0000	.37500	5.0000	.7900-02	.6600-02	.8800-02	.3900-03	.3247-03	.4336-03	.2610	2.745	542.8
7N	1.0000	.40000	6.0000	.8400-02	.7000-02	.9300-02	.4132-03	.3440-03	.4594-03	.2770	2.844	542.4
7N	1.0000	.42500	7.0000	.8700-02	.7200-02	.9700-02	.4284-03	.3526-03	.4764-03	.2870	2.972	543.1
7N	1.0000	.45000	8.0000	.1510-01	.1260-01	.1680-01	.7440-03	.6190-03	.8275-03	.4970	5.073	544.8
7N	1.0000	.47500	9.0000	.1300-01	.1080-01	.1440-01	.6381-03	.5309-03	.7098-03	.4260	4.327	545.3
7N	1.0000	.50000	10.000	.1360-01	.1130-01	.1510-01	.6696-03	.5571-03	.7448-03	.4470	4.520	545.3
7N	1.0000	.52500	11.000	.1770-01	.1470-01	.1970-01	.8713-03	.7246-03	.9694-03	.5800	5.861	547.0
7N	1.0000	.55000	12.000	.1960-01	.1630-01	.2180-01	.9622-03	.8001-03	.1071-02	.6400	6.409	547.4
7N	1.0000	.60000	13.000	.2350-01	.1950-01	.2620-01	.1157-02	.9612-03	.1288-02	.7660	7.732	550.2
7N	1.0000	.65000	14.000	.5290-01	.4390-01	.5890-01	.2601-02	.2159-02	.2898-02	1.711	17.24	554.5
7N	1.0000	.70000	15.000	.4310-01	.3570-01	.4800-01	.2121-02	.1759-02	.2364-02	1.388	13.47	557.8
7N	1.0000	.75000	16.000	.1760-01	.1470-01	.1960-01	.8677-03	.7212-03	.9658-03	.5750	5.812	549.1
7N	1.0000	.80000	17.000	.6100-02	.5100-02	.6800-02	.3012-03	.2505-03	.3352-03	.2000	1.939	546.9
7N	2.0000	.28500	18.000	.1010-01	.8400-02	.1120-01	.4964-03	.4133-03	.55.8-03	.3330	3.906	541.9
7N	2.0000	.33700	19.000	.9700-02	.8100-02	.1080-01	.4798-03	.3996-03	.5333-03	.3220	3.803	541.0
7N	2.0000	.39000	20.000	.9800-02	.8200-02	.1090-01	.4842-03	.4033-03	.5381-03	.3250	3.839	540.7
7N	2.0000	.42600	21.000	.19.4-01	.1600-01	.2140-01	.9458-03	.7870-03	.1052-02	.6310	7.398	544.9
7N	2.0000	.47800	22.000	.2250-01	.1970-01	.2500-01	.1105-02	.9194-03	.1229-02	.7370	8.201	545.6

DATE 07 OCT 75

ON-7N (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 278

IRV80031

ON-7N (AEDC V418-88A) B65C12F10M18U127E52V8N19

RLN NUMBER	TRACE	K/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	M/HREF R-TAN	H19T0 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
74	2.0000	53000	23.000	3520-01	2020-01	3920-01	1732-02	1439-02	1929-02	1.146	12.72	550.8
74	2.0000	55700	24.000	6240-01	5180-01	6960-01	3072-02	2947-02	3424-02	2.010	21.69	558.0
74	2.0000	62000	25.000	4420-01	3620-01	4920-01	2174-02	1804-02	2422-02	1.430	15.46	559.5
74	2.0000	67000	26.000	1650-01	1370-01	1830-01	8102-03	6738-03	9015-03	5.590	5.848	547.1
74	2.0000	70500	27.000	1120-01	9300-02	1250-01	9512-03	4966-03	6131-03	3.680	3.954	545.3
74	2.0000	75000	28.000	7100-02	5900-02	7900-02	3508-03	2821-03	3801-03	2.350	2.578	543.1
74	2.0000	80000	29.000	5900-02	4900-02	6500-02	2894-03	2409-03	3218-03	1.930	2.134	543.8
74	2.0000	82400	30.000	2300-02	1900-02	2600-02	1152-03	9579-04	1281-03	7700-01	1.067	546.0
74	3.0000	20000	31.000	1950-01	1900-01	2600-01	1157-02	9608-03	1288-02	7640	8.070	552.0
74	3.0000	22500	32.000	1970-01	1640-01	2200-01	9716-03	8077-03	1081-02	6450	7.208	548.2
74	3.0000	25000	33.000	1460-01	1210-01	1620-01	7162-03	5961-03	7965-03	4.790	5.361	543.8
74	3.0000	27500	34.000	1130-01	9400-02	1250-01	5554-03	4626-03	6174-03	3.730	4.471	541.2
74	3.0000	30000	35.000	1010-01	6400-02	1120-01	4978-03	147-03	5532-03	3.350	4.152	539.8
74	3.0000	32500	36.000	1110-01	9200-02	1230-01	5444-03	6049-03	6049-03	3.660	4.301	539.9
74	3.0000	35000	37.000	9900-02	8300-02	1100-01	4687-03	4071-03	5431-03	3.290	3.820	539.9
74	3.0000	37500	38.000	1610-01	1340-01	1750-01	7929-03	6603-03	6815-03	6.242	6.242	541.7
74	3.0000	40000	39.000	2330-01	1940-01	2590-01	1148-02	955-03	1276-02	7670	9.046	543.7
74	3.0000	42500	40.000	2500-01	2080-01	2780-01	1231-02	1024-02	1369-02	8200	9.715	545.7
74	3.0000	45000	41.000	3450-01	2870-01	3840-01	1698-02	1413-02	1890-02	1.130	12.88	547.5
74	3.0000	47500	42.000	5160-01	4280-01	5740-01	2537-02	2107-02	2826-02	1.673	18.55	553.1
74	3.0000	50000	43.000	6400-01	5310-01	7130-01	3150-02	2612-02	3511-02	2.060	22.78	558.3
74	3.0000	52500	44.000	5540-01	4590-01	6180-01	2726-02	2261-02	3039-02	1.784	20.78	557.8
74	3.0000	55000	45.000	3780-01	3140-01	4210-01	1860-02	1945-02	2071-02	1.229	13.63	551.7
74	3.0000	60000	46.000	1470-01	1220-01	1640-01	7244-03	6028-03	8057-03	4.640	5.254	544.7
74	3.0000	65000	47.000	1330-01	8600-02	1140-01	5059-03	4211-03	5626-03	3.380	3.588	543.8
74	3.0000	70000	48.000	6800-02	5700-02	7600-02	3343-03	2783-03	3716-03	2.240	2.472	542.4
74	3.0000	75000	49.000	4200-02	3500-02	4700-02	2074-03	1727-03	2306-03	1.390	1.514	541.7
74	3.0000	80000	50.000	4300-02	3600-02	4400-02	2119-03	1764-03	2351-03	1.420	1.522	542.3
74	3.0000	85000	51.000	3000-02	2500-02	3300-02	1469-03	1222-03	1634-03	9800-01	1.209	546.5
74	3.0000	87500	52.000	4800-02	4000-02	5300-02	2364-03	1965-03	2630-03	1.570	1.940	547.9
74	3.0000	90000	53.000	6200-02	5100-02	6900-02	3037-03	2524-03	3380-03	2.020	2.799	548.7
74	3.0000	92500	54.000	6700-02	5500-02	7400-02	3284-03	2730-03	3654-03	2.180	2.850	548.4
74	3.0000	95000	55.000	9200-02	7600-02	1020-01	4518-03	3756-03	5028-03	3.000	3.031	548.4
74	4.0000	20000	71.000	3140-01	2600-01	3500-01	1543-02	1281-02	1723-02	1.011	11.46	558.3
74	4.0000	22500	72.000	2430-01	2020-01	2710-01	1198-02	9950-03	1334-02	7910	9.237	552.1
74	4.0000	25000	73.000	1820-01	1520-01	2030-01	6980-03	7484-03	9594-03	5.960	6.970	548.7
74	4.0000	27500	74.000	1470-01	1230-01	1840-01	7250-03	6031-03	8065-03	4.830	5.972	546.1
74	4.0000	30000	56.000	1200-01	1000-01	1340-01	5918-03	326-03	6590-03	3.960	5.194	542.9
74	4.0000	32500	57.000	1780-01	1480-01	1990-01	8767-03	7297-03	9748-03	5.860	7.686	543.5
74	4.0000	35000	58.000	3350-01	2780-01	3720-01	1647-02	1369-02	1833-02	1.092	14.28	549.1
74	4.0000	37500	59.000	5280-01	4380-01	5680-01	2597-02	2155-02	2893-02	1.710	22.30	553.9
74	4.0000	40000	60.000	5680-01	4870-01	6550-01	2892-02	2397-02	3225-02	1.885	24.50	560.4
74	4.0000	42500	61.000	4310-01	3580-01	4800-01	2122-02	1762-02	2363-02	1.400	18.26	552.8



DATE 07 OCT 75

04-74 (ALDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 279

04-74 (ALDC V418-88A) 862C12F10H16H127E52VR19

(RVB003)

PLAN NUMBER	TRAFFIC	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H19T0 BTU/R FT2SEC	H1T0 BTU/R FT2SEC	H1TAM BTU/R FT2SEC	QDOT BTU/ FT2SEC	OTMCT DEG. R /SEC	TM DEG. R
74	4.0000	45000	62.000	.2340-01	.1950-01	.2610-01	.1154-02	.9499-03	.1284-02	.7690	9.945	546.2
74	4.0000	47500	63.000	.1940-01	.1280-01	.1710-01	.7567-03	.6296-03	.6416-03	.5050	6.425	545.0
74	4.0000	50000	64.000	.1050-01	.8700-01	.1160-01	.5144-03	.4282-02	.5720-03	.3440	4.260	543.4
74	4.0000	52500	65.000	.7600-02	.6600-02	.6600-02	.3895-03	.3242-03	.4331-03	.2610	3.226	543.4
74	4.0000	55000	66.000	.7000-02	.5900-02	.7700-02	.3426-03	.2682-03	.3809-03	.2293	2.691	542.9
74	4.0000	60000	67.000	.5200-02	.4400-02	.5900-02	.2572-03	.2141-03	.2859-03	.1720	1.940	542.4
74	4.0000	65000	68.000	.4000-02	.3300-02	.4500-02	.1976-03	.1645-03	.2197-03	.1320	1.554	542.3
74	4.0000	70000	69.000	.2200-02	.1900-02	.2500-02	.1096-03	.9124-01	.1219-03	.7300-01	.8180	542.8
74	4.0000	75000	70.000	.1300-02	.1100-02	.1500-02	.6468-04	.5386-04	.7189-04	.4300-01	.4840	541.4
74	4.0000	80000	73.000	.1300-02	.1100-02	.1400-02	.6330-04	.5269-04	.7039-04	.4200-01	.5100	543.5
74	4.0000	85000	76.000	.1600-02	.1300-02	.1700-02	.7677-04	.6388-04	.6537-04	.5100-01	.6080	544.3
74	4.0000	87500	77.000	.1600-02	.1400-02	.1800-02	.8083-04	.6726-04	.6990-04	.5400-01	.7070	544.7
74	4.0000	90000	78.000	.2400-02	.2000-02	.2700-02	.1175-03	.9773-04	.1307-03	.7810-01	1.014	545.2
74	4.0000	92500	79.000	.2300-02	.2000-02	.2500-02	.1135-03	.9778-04	.1233-03	.9510-01	1.292	372.0
74	4.0000	95000	80.000	.2400-02	.2000-02	.2700-02	.1193-03	.9824-04	.1327-03	.7900-01	.9310	546.3

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 280

(RV8003)

04-74 (AEDC V41B-B8A) B62C12F10H16W127E5V8R19

ORBITER FUSELAGE

PARAMETER C DATA

BETA = 2.000 MACH = 2.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUG/FT ³	MU LB-SEC /FT ²
75	8.000	29.83	887.3	134.8	-90.02	2.000	97.70	.8900-01	3.980	3874.	.7631-04	.7864-07
75	3.759	.4931-01	.2080-01									

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DT4OT DEG. R /SEC	TW DEG. R
75	1.0000	.27500	1.0000	.1670-01	.1390-01	.1860-01	.8239-03	.6834-03	.9166-03	.5490	5.686	546.4
75	1.0000	.30000	2.0000	.1420-01	.1180-01	.1580-01	.7006-03	.5829-03	.7794-03	.4670	4.953	546.2
75	1.0000	.32500	3.0000	.1270-01	.1060-01	.1410-01	.6268-03	.5216-03	.6972-03	.4190	4.296	545.2
75	1.0000	.35000	4.0000	.1360-01	.1130-01	.1510-01	.6681-03	.5558-03	.7431-03	.4460	4.616	545.8
75	1.0000	.37500	5.0000	.1290-01	.1070-01	.1430-01	.6360-03	.5290-03	.7075-03	.4240	4.448	546.7
75	1.0000	.40000	6.0000	.2050-01	.1700-01	.2280-01	.1010-02	.8399-03	.1124-02	.6720	6.879	548.5
75	1.0000	.42500	7.0000	.1920-01	.1590-01	.2130-01	.9444-03	.7850-03	.1051-02	.6270	6.479	549.3
75	1.0000	.45000	8.0000	.2290-01	.1910-01	.2550-01	.1131-02	.9401-03	.1259-02	.7500	7.644	549.9
75	1.0000	.47500	9.0000	.1960-01	.1630-01	.2180-01	.9667-03	.8034-03	.1076-02	.6410	6.500	550.2
75	1.0000	.50000	10.000	.2010-01	.1670-01	.2240-01	.9910-03	.8235-03	.1103-02	.6570	6.631	550.3
75	1.0000	.52500	11.000	.2920-01	.2430-01	.3250-01	.1441-02	.1196-02	.1604-02	.9520	9.596	552.6
75	1.0000	.55000	12.000	.2870-01	.2380-01	.3190-01	.1413-02	.1173-02	.1573-02	.9340	9.338	551.9
75	1.0000	.60000	13.000	.4230-01	.3510-01	.4710-01	.2084-02	.1728-02	.2323-02	1.366	13.74	557.7
75	1.0000	.65000	14.000	.6500-01	.5390-01	.7250-01	.3205-02	.2655-02	.3574-02	2.089	20.97	561.3
75	1.0000	.70000	15.000	.5640-01	.5500-01	.7410-01	.3274-02	.2712-02	.3652-02	2.130	20.62	562.5
75	1.0000	.75000	16.000	.5000-01	.4150-01	.5570-01	.2464-02	.2044-02	.2747-02	1.616	16.26	557.4
75	1.0000	.80000	17.000	.3360-01	.2790-01	.3740-01	.1655-02	.1373-02	.1844-02	1.089	10.49	555.2
75	1.0000	.85000	18.000	.1710-01	.1420-01	.1900-01	.8419-03	.7002-03	.9377-03	.5610	6.564	547.2
75	2.0000	.33700	19.000	.1560-01	.1300-01	.1740-01	.7698-03	.6402-03	.8565-03	.5130	6.033	547.3
75	2.0000	.39000	20.000	.2690-01	.2230-01	.2990-01	.1324-02	.1100-02	.1474-02	.8780	10.32	550.2
75	2.0000	.42600	21.000	.3060-01	.2540-01	.3410-01	.1509-02	.1254-02	.1681-02	.9970	11.63	552.9
75	2.0000	.47800	22.000	.3410-01	.2830-01	.3800-01	.1681-02	.1396-02	.1872-02	1.109	12.30	553.2

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V418-B8A) B62C12F10M16W127E25V8R19

RUN NUMBER	TIME	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H19T0 BTU/ R FT/SEC	H1T0 BTU/ R FT/SEC	H1TAM BTU/ R FT/SEC	QDOT BTU/ FT/SEC	DTMDT DEG. R /SEC	TM DEG. R
75	2.0000	.53000	23.000	.5590-01	.4630-01	.6240-01	.2757-02	.2785-02	.3073-02	1.798	18.86	560.9
75	2.0000	.56700	24.000	.7830-01	.6480-01	.8740-01	.3859-02	.3194-02	.4308-02	2.495	26.81	568.7
75	2.0000	.62000	25.000	.5260-01	.4360-01	.5860-01	.2591-02	.2149-02	.2888-02	1.699	18.34	557.4
75	2.0000	.67000	26.000	.3260-01	.2710-01	.3630-01	.1608-02	.1335-02	.1791-02	1.061	11.47	553.7
75	2.0000	.70500	27.000	.2150-01	.1780-01	.2390-01	.1058-02	.8793-03	.1178-02	.7000	7.510	551.4
75	2.0000	.75000	28.000	.1630-01	.1360-01	.1820-01	.8049-03	.6691-03	.8954-03	.5340	5.850	549.3
75	2.0000	.80000	29.000	.1380-01	.1150-01	.1540-01	.6817-03	.5668-03	.7587-03	.4530	4.984	548.7
75	2.0000	.82400	30.000	.4200-02	.3500-02	.4700-02	.2062-03	.1714-03	.2295-03	.1370	1.900	549.6
75	3.0000	.20000	31.000	.3630-01	.3010-01	.4040-01	.1787-02	.1482-02	.1993-02	1.168	12.29	559.8
75	3.0000	.22500	32.000	.3040-01	.2520-01	.3390-01	.1500-02	.1245-02	.1671-02	.9860	10.98	555.5
75	3.0000	.25000	33.000	.2390-01	.1990-01	.2660-01	.1178-02	.9792-03	.1312-02	.7810	8.718	550.2
75	3.0000	.27500	34.000	.1850-01	.1530-01	.2050-01	.9098-03	.7565-03	.1012-02	.6050	7.236	547.9
75	3.0000	.30000	35.000	.1710-01	.1420-01	.1900-01	.8438-03	.7018-03	.9387-03	.5620	6.949	546.8
75	3.0000	.32500	36.000	.1710-01	.1430-01	.1910-01	.8451-03	.7030-03	.9402-03	.5630	6.596	546.7
75	3.0000	.35000	37.000	.2670-01	.2220-01	.2980-01	.1318-02	.1096-02	.1467-02	.8750	16.13	549.3
75	3.0000	.37500	38.000	.3280-01	.2720-01	.3650-01	.1618-02	.1342-02	.1799-02	1.069	12.49	551.3
75	3.0000	.40000	39.000	.4010-01	.3330-01	.4470-01	.1977-02	.1642-02	.2202-02	1.305	15.31	553.1
75	3.0000	.42500	40.000	.3520-01	.2920-01	.3920-01	.1736-02	.1441-02	.2020-02	1.144	13.48	554.3
75	3.0000	.45000	41.000	.5270-01	.4370-01	.5670-01	.2598-02	.2156-02	.2895-02	1.706	19.37	556.4
75	3.0000	.47500	42.000	.6310-01	.5230-01	.7040-01	.3113-02	.2579-02	.3473-02	2.026	22.36	562.5
75	3.0000	.50000	43.000	.5340-01	.4430-01	.5950-01	.2633-02	.2183-02	.2936-02	1.722	19.04	559.0
75	3.0000	.52500	44.000	.3930-01	.3260-01	.4380-01	.1937-02	.1600-02	.2158-02	1.277	14.89	554.3
75	3.0000	.55000	45.000	.3020-01	.2510-01	.3360-01	.1488-02	.1236-02	.1657-02	.9840	10.91	551.3
75	3.0000	.57500	46.000	.1670-01	.1390-01	.1860-01	.8235-03	.6845-03	.9185-03	.5470	5.927	549.2
75	3.0000	.60000	47.000	.9500-02	.7900-02	.1050-01	.4704-03	.3911-03	.5234-03	.3130	3.312	548.2
75	3.0000	.62500	48.000	.6900-02	.5700-02	.7700-02	.3398-03	.2824-03	.3780-03	.2260	2.495	546.6
75	3.0000	.65000	49.000	.6900-02	.5700-02	.7700-02	.3398-03	.2824-03	.3780-03	.2260	2.458	546.0
75	3.0000	.67500	50.000	.5800-02	.4800-02	.6500-02	.2873-03	.2390-03	.3196-03	.1920	2.052	545.8
75	3.0000	.70000	51.000	.8400-02	.7000-02	.9400-02	.4150-03	.3448-03	.4621-03	.2750	3.388	551.3
75	3.0000	.72500	52.000	.8500-02	.7000-02	.9400-02	.4184-03	.3476-03	.4658-03	.2770	3.413	551.6
75	3.0000	.75000	53.000	.1350-01	.1120-01	.1510-01	.6676-03	.5543-03	.7435-03	.4400	6.100	553.7
75	3.0000	.77500	54.000	.1930-01	.1600-01	.2150-01	.9530-03	.7912-03	.1062-02	.6280	8.186	554.3
75	3.0000	.80000	55.000	.2030-01	.1690-01	.2260-01	.1002-02	.8324-03	.1116-02	.6630	6.688	551.6
75	3.0000	.82500	56.000	.4280-01	.3540-01	.4780-01	.2113-02	.1748-02	.2359-02	1.365	15.41	567.3
75	4.0000	.20000	71.000	.3220-01	.2670-01	.3590-01	.1588-02	.1316-02	.1770-02	1.038	12.07	559.5
75	4.0000	.22500	72.000	.2560-01	.2120-01	.2850-01	.1260-02	.1046-02	.1404-02	.8310	9.691	554.0
75	4.0000	.25000	73.000	.2370-01	.1970-01	.2640-01	.1170-02	.9718-03	.1303-02	.7730	9.528	552.4
75	4.0000	.27500	74.000	.2280-01	.1900-01	.2540-01	.1125-02	.9351-03	.1273-02	.7450	9.736	550.7
75	4.0000	.30000	75.000	.3940-01	.3270-01	.4390-01	.1913-02	.1613-02	.2166-02	1.277	16.64	556.0
75	4.0000	.32500	76.000	.3940-01	.3270-01	.4390-01	.1913-02	.1613-02	.2166-02	1.277	16.64	556.0
75	4.0000	.35000	77.000	.5750-01	.4770-01	.6420-01	.2837-02	.2350-02	.3165-02	1.844	23.94	563.1
75	4.0000	.37500	78.000	.4650-01	.3860-01	.5180-01	.2293-02	.1902-02	.2595-02	1.503	19.56	557.7
75	4.0000	.40000	79.000	.3270-01	.2710-01	.3640-01	.1611-02	.1337-02	.1795-02	1.061	13.83	554.7
75	4.0000	.42500	81.000	.2760-01	.2290-01	.3070-01	.1359-02	.1129-02	.1514-02	.8980	11.71	552.8

DATE 07 OCT 75

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 282

04-74 (AEDC V41B-B8A) B62C12F10H16H127E32V8R19

(RV8003)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R-0.9	H/HREF R-1.0	H/HREF R-TAM	H(ISO) BTU/ R FT2SEC	H(ISO) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	OOT BTU/ R FT2SEC	DTMDT DEC. R /SEC	TH DEC. R
75	4.0000	.45000	62.000	.1690-01	.1410-01	.1690-01	.8356-03	.6944-03	.9302-03	.5540	7.150	550.4
75	4.0000	.47500	63.000	.1200-01	.1000-01	.1340-01	.5916-03	.4918-03	.8584-03	.3930	4.990	549.0
75	4.0000	.50000	64.000	.8500-02	.7100-02	.9500-02	.4201-03	.3494-03	.4675-03	.2800	3.456	547.5
75	4.0000	.52500	65.000	.6600-02	.5500-02	.7300-02	.3294-03	.2706-03	.3620-03	.2170	2.679	547.0
75	4.0000	.55000	66.000	.5600-02	.4600-02	.6200-02	.2756-03	.2293-03	.3066-03	.1840	2.154	546.0
75	4.0000	.60000	67.000	.4000-02	.3400-02	.4500-02	.1986-03	.1661-03	.2220-03	.1330	1.499	545.2
75	4.0000	.65000	68.000	.3100-02	.2600-02	.3500-02	.1539-03	.1280-03	.1711-03	.1030	1.204	545.2
75	4.0000	.70000	69.000	.1800-02	.1500-02	.2000-02	.9026-04	.7512-04	.1004-03	.6000-01	.6710	544.4
75	4.0000	.75000	70.000	.2000-02	.1700-02	.2200-02	.5945-04	.8277-04	.1106-03	.6700-01	.7410	544.4
75	4.0000	.80000	75.000	.2600-02	.2100-02	.2900-02	.1270-03	.1056-03	.1412-03	.8500-01	1.021	545.2
75	4.0000	.85000	76.000	.4900-02	.4000-02	.5400-02	.2399-03	.1998-03	.2669-03	.1600	1.695	546.1
75	4.0000	.87500	77.000	.5400-02	.4500-02	.6000-02	.2679-03	.2228-03	.2981-03	.1780	2.334	547.4
75	4.0000	.90000	78.000	.6100-02	.5000-02	.6800-02	.2993-03	.2489-03	.3331-03	.1990	2.573	548.1
75	4.0000	.92500	79.000	.7800-02	.6500-02	.8700-02	.3867-03	.3215-03	.4303-03	.2570	3.175	548.4
75	4.0000	.95000	80.000	.7500-02	.6200-02	.8400-02	.3704-03	.3080-03	.4122-03	.2460	2.881	548.4

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 283

OH-74 (AEDC V41B-B8A) 882C12F10H16W127E52V8R19

(RV8004)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = -1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAH DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
7	7.880	19.71	83.80	1177.	174.3	-1.000	87.70	.9000-02	.4110	3616.	.8052-05	.7082-07

RUN NUMBER	RN/L X10 ⁶ /FT	WREF BTU/ R FT ² SEC	STN NO R= .0175
7	.4635	.1548-01	.5924-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	W/HREF R=0.9	W/HREF R=1.0	W/HREF R=TAN	H19T01 BTU/ R FT ² SEC	H1T01 BTU/ R FT ² SEC	H1TAH BTU/ R FT ² SEC	QDOT BTU/ FT ² SEC	DTROT DEG. R /SEC	TW DEG. R
7	1.0000	.27500	1.0000	.1180-01	.9600-02	.1330-01	.1819-03	.1484-03	.2052-03	.9500-01	.9830	539.4
7	1.0000	.30000	2.0000	.1030-01	.8400-02	.1170-01	.1602-03	.1306-03	.1806-03	.8300-01	.8850	539.4
7	1.0000	.32500	3.0000	.8300-02	.6800-02	.9400-02	.1284-03	.1047-03	.1448-03	.6700-01	.6880	539.0
7	1.0000	.35000	4.0000	.7900-02	.6400-02	.8900-02	.1224-03	.9882-04	.1380-03	.6400-01	.6620	538.8
7	1.0000	.37500	5.0000	.7800-02	.6400-02	.8800-02	.1211-03	.9874-04	.1366-03	.6300-01	.6630	539.4
7	1.0000	.40000	6.0000	.8500-02	.7000-02	.9600-02	.1322-03	.1078-03	.1491-03	.6900-01	.7080	539.0
7	1.0000	.42500	7.0000	.8600-02	.7000-02	.9700-02	.1336-03	.1090-03	.1507-03	.6900-01	.7220	539.3
7	1.0000	.45000	8.0000	.1200-01	.9800-02	.1360-01	.1682-03	.1518-03	.2100-03	.9700-01	.9920	539.3
7	1.0000	.47500	9.0000	.1500-01	.1230-01	.1690-01	.2327-03	.1698-03	.2624-03	.1210	1.234	539.2
7	1.0000	.50000	10.000	.1610-01	.1310-01	.1810-01	.2490-03	.2030-03	.2807-03	.1290	1.314	539.3
7	1.0000	.52500	11.000	.1850-01	.1510-01	.2090-01	.2870-03	.2340-03	.3236-03	.1490	1.514	538.5
7	1.0000	.55000	12.000	.2240-01	.1830-01	.2520-01	.3466-03	.2826-03	.3908-03	.1800	1.811	539.6
7	1.0000	.60000	13.000	.2990-01	.2140-01	.3370-01	.4629-03	.3774-03	.5221-03	.2400	2.439	540.1
7	1.0000	.65000	14.000	.3160-01	.2580-01	.3573-01	.4897-03	.3992-03	.5523-03	.2540	2.580	540.0
7	1.0000	.70000	15.000	.1940-01	.1580-01	.2190-01	.3006-03	.2451-03	.3389-03	.1560	1.531	539.3
7	1.0000	.75000	16.000	.1150-01	.9400-02	.1300-01	.1784-03	.1455-03	.2012-03	.9300-01	.9430	538.8
7	1.0000	.80000	17.000	.5100-02	.4200-02	.5700-02	.7892-04	.6437-04	.8898-04	.4100-01	.3990	538.8
7	1.0000	.85000	18.000	.1160-01	.9500-02	.1310-01	.1798-03	.1466-03	.2077-03	.9400-01	1.101	538.6
7	2.0000	.28500	18.000	.1160-01	.9500-02	.1310-01	.1798-03	.1466-03	.2077-03	.9400-01	1.101	538.6
7	2.0000	.33700	19.000	.1120-01	.9200-02	.1270-01	.1739-03	.1419-03	.1961-03	.9100-01	1.071	538.2
7	2.0000	.39000	20.000	.1190-01	.9700-02	.1340-01	.1838-03	.1500-03	.2072-03	.9600-01	1.133	538.1
7	2.0000	.42600	21.000	.1460-01	.1190-01	.1650-01	.2261-03	.1844-03	.2549-03	.1180	1.363	538.8
7	2.0000	.47800	22.000	.2650-01	.2160-01	.2990-01	.4104-03	.3347-03	.4628-03	.2140	2.385	539.0

DATE 07 OCT 75

04-74 (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 284

04-74 (AEDC V418-88A) 862C12F1016H127E52V8R19 (RV8004)

RUN NUMBER	TRAJE	X/L	T/C NO	M/HREF R=0.9	M/HREF R=1.0	M/HREF R=TAM	M1GTO BTU/ R FT2SEC	H1TO BTU/ R FT2SEC	M1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DT4DOT DEG. R /SEC	TM DEG. R
7	2.0000	.53000	23.000	.3630-01	.2980-01	.4090-01	.5616-03	.4578-03	.6335-03	.2910	3.251	540.5
7	2.0000	.56700	24.000	.3220-01	.2620-01	.3630-01	.4978-03	.4058-03	.5814-03	.2590	2.816	539.9
7	2.0000	.62000	25.000	.2140-01	.1750-01	.2420-01	.3321-03	.2708-03	.3744-03	.1730	1.882	539.2
7	2.0000	.67000	26.000	.1210-01	.9800-02	.1360-01	.1868-03	.1524-03	.2105-03	.9700-01	1.083	537.5
7	2.0000	.70500	27.000	.1140-01	.9300-02	.1280-01	.1764-03	.1440-03	.1988-03	.9200-01	.9850	537.1
7	2.0000	.75000	28.000	.7000-02	.5700-02	.7800-02	.1078-03	.8783-04	.1213-03	.5800-01	.6120	537.4
7	2.0000	.80000	29.000	.5300-02	.4300-02	.6000-02	.8191-04	.6683-04	.5232-04	.4300-01	.4730	537.5
7	2.0000	.82400	30.000	.1700-02	.1210-01	.2000-02	.2688-04	.2193-04	.3029-04	.1400-01	.1980	537.8
7	3.0000	.20000	31.000	.2710-01	.2210-01	.3060-01	.4196-03	.3418-03	.4735-03	.2170	2.304	542.3
7	3.0000	.22500	32.000	.2010-01	.1640-01	.2270-01	.3116-03	.2539-03	.3515-03	.1610	1.811	541.0
7	3.0000	.25000	33.000	.1700-01	.1380-01	.1910-01	.2628-03	.2143-03	.2984-03	.1370	1.533	539.4
7	3.0000	.27500	34.000	.1330-01	.1080-01	.1500-01	.2054-03	.1676-03	.2316-03	.1070	1.285	538.5
7	3.0000	.30000	35.000	.1090-01	.8900-02	.1230-01	.1684-03	.1374-03	.1898-03	.8800-01	1.090	537.8
7	3.0000	.32500	36.000	.1190-01	.9700-02	.1340-01	.1845-03	.1505-03	.2080-03	.9600-01	1.132	537.8
7	3.0000	.35000	37.000	.1220-01	.9900-02	.1370-01	.1888-03	.1540-03	.2128-03	.9800-01	1.146	537.8
7	3.0000	.37500	38.000	.1430-01	.1170-01	.1620-01	.2220-03	.1811-03	.2503-03	.1160	1.362	537.9
7	3.0000	.40000	39.000	.2040-01	.1660-01	.2300-01	.3157-03	.2576-03	.3559-03	.1650	1.946	538.0
7	3.0000	.42500	40.000	.3000-01	.2440-01	.3380-01	.4641-03	.3749-03	.5233-03	.2410	2.868	539.0
7	3.0000	.45000	41.000	.3330-01	.2710-01	.3750-01	.5152-03	.4232-03	.5809-03	.2680	3.071	538.9
7	3.0000	.47500	42.000	.3590-01	.2920-01	.4050-01	.5554-03	.4528-03	.6283-03	.2890	3.222	539.7
7	3.0000	.50000	43.000	.3410-01	.2780-01	.3850-01	.5283-03	.4307-03	.5957-03	.2750	3.065	539.7
7	3.0000	.52500	44.000	.2570-01	.2090-01	.2890-01	.3973-03	.3240-03	.4480-03	.2070	2.432	538.8
7	3.0000	.55000	45.000	.2060-01	.1680-01	.2320-01	.3191-03	.2603-03	.3588-03	.1660	1.855	538.8
7	3.0000	.60000	46.000	.1190-01	.9700-02	.1340-01	.1845-03	.1505-03	.2080-03	.9600-01	1.049	538.0
7	3.0000	.65000	47.000	.8300-02	.6800-02	.9400-02	.1286-03	.1049-03	.1449-03	.6700-01	.7140	537.8
7	3.0000	.70000	48.000	.6200-02	.5000-02	.7000-02	.9569-04	.7808-04	.1078-03	.5000-01	.5530	537.3
7	3.0000	.75000	49.000	.5200-02	.4200-02	.5800-02	.8004-04	.6532-04	.9020-04	.4200-01	.4560	537.0
7	3.0000	.80000	50.000	.4400-02	.3600-02	.5000-02	.6887-04	.5620-04	.7761-04	.3600-01	.3870	537.0
7	3.0000	.87500	52.000	.3700-02	.3000-02	.4100-02	.5680-04	.4633-04	.6404-04	.3000-01	.3670	538.8
7	3.0000	.90000	53.000	.4000-02	.3300-02	.4500-02	.6228-04	.5078-04	.7023-04	.3200-01	.4520	539.4
7	3.0000	.92500	54.000	.4500-02	.3700-02	.5100-02	.6986-04	.5696-04	.7878-04	.3600-01	.4770	539.6
7	3.0000	.95000	55.000	.3400-02	.2800-02	.3900-02	.5317-04	.4336-04	.5995-04	.2800-01	.2810	539.0
7	4.0000	.20000	71.000	.3190-01	.2600-01	.3610-01	.4945-03	.4025-03	.5583-03	.2550	2.907	544.5
7	4.0000	.22500	72.000	.2550-01	.2080-01	.2880-01	.3953-03	.3220-03	.4482-03	.2040	2.396	542.7
7	4.0000	.25000	73.000	.1870-01	.1520-01	.2110-01	.2891-03	.2356-03	.3282-03	.1500	1.757	541.6
7	4.0000	.27500	74.000	.1590-01	.1300-01	.1800-01	.2468-03	.2011-03	.2785-03	.1280	1.585	541.3
7	4.0000	.30000	75.000	.1420-01	.1160-01	.1600-01	.2198-03	.1792-03	.2478-03	.1140	1.502	539.2
7	4.0000	.32500	76.000	.1730-01	.1410-01	.1950-01	.2674-03	.2180-03	.30.5-03	.1390	1.825	539.6
7	4.0000	.35000	77.000	.2520-01	.2050-01	.2840-01	.3895-03	.3176-03	.4393-03	.2020	2.657	539.9
7	4.0000	.37500	78.000	.3260-01	.2650-01	.3670-01	.5041-03	.4109-03	.5686-03	.2620	3.435	540.3
7	4.0000	.40000	79.000	.2990-01	.2440-01	.3370-01	.4626-03	.3771-03	.5217-03	.2400	3.152	540.3
7	4.0000	.42500	80.000	.2610-01	.2100-01	.2810-01	.3587-03	.2925-03	.4046-03	.1860	2.449	539.6
7	4.0000	.45000	81.000	.1780-01	.1450-01	.2010-01	.2757-03	.2248-03	.3109-03	.1430	1.860	539.6

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 285

OH-74 (AEDC V418-B8A) B62C12F10M16H127E52V8R19

(RV8004)

RUN NUMBER	TRA-E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1(90) BTU/ R FT2SEC	H1(0) BTU/ R FT2SEC	H1(TAN) BTU/ R FT2SEC	QOOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
7	4.0000	.47500	63.000	.1380-01	.1120-01	.1550-01	.2131-03	.1738-03	.2403-03	.1110	1.414	539.4
7	4.0000	.50000	64.000	.1110-01	.9100-02	.1260-01	.1728-03	.1407-03	.1946-03	.9000-01	1.114	538.9
7	4.0000	.52500	65.000	.7900-02	.6400-02	.8900-02	.1217-03	.9925-04	.1372-03	.6300-01	.7850	539.1
7	4.0000	.55000	66.000	.6900-02	.5600-02	.7800-02	.1069-03	.8722-04	.1206-03	.5600-01	.6540	538.8
7	4.0000	.60000	67.000	.5100-02	.4200-02	.5700-02	.7879-04	.6427-04	.8882-04	.4100-01	.4630	538.2
7	4.0000	.65000	68.000	.3600-02	.3030-02	.4100-02	.5619-04	.4584-04	.6334-04	.2900-01	.3440	538.2
7	4.0000	.70000	69.000	.4000-02	.3300-02	.4500-02	.6233-04	.5084-04	.7027-04	.3200-01	.3630	538.3
7	4.0000	.75000	70.000	.3400-02	.2800-02	.3800-02	.5241-04	.4277-04	.5906-04	.2700-01	.3060	537.0
7	4.0000	.80000	75.000	.1000-02	.9000-03	.1200-02	.1620-04	.1322-04	.1826-04	.8000-02	1.020	537.6
7	4.0000	.85000	76.000	.7900-02	.6400-02	.8900-02	.1223-03	.9979-04	.1378-03	.6400-01	.7600	537.0
7	4.0000	.87500	77.000	.9000-03	.7000-03	.1000-02	.1391-04	.1135-04	.1568-04	.7000-02	.9500-01	537.5
7	4.0000	.90000	78.000	.7000-03	.5000-03	.8000-03	.1037-04	.8460-05	.1169-04	.5000-02	.7000-01	538.0
7	4.0000	.92500	79.000	.3700-02	.3000-02	.4100-02	.5696-04	.4646-04	.6421-04	.3000-01	.3680	538.5
7	4.0000	.95000	80.000	.1600-02	.1300-02	.1800-02	.2458-04	.2005-04	.2772-04	.0000	.0000	583.3

DATE 07 OCT 75

OH-7A (AEDC W418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 286

OH-7A (AEDC W418-88A) 862C12F10H16H127E52V8R19

(RV80004)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = -1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
8	7.880	24.97	83.60	1177.	168.8	-1.000	87.70	.9000-02	.4100	3816.	.9032-05	.7082-07

RUN NUMBER	RN/L X10 ⁶ /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175
8	.4625	.1547-01	.5950-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(970) BTU/ R FT ² SEC	H(10) BTU/ R FT ² SEC	H(14H) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	QDOT DEG. R /SEC	TN DEG. R
8	1.0000	.27500	1.0000	.1230-01	.1000-01	.1390-01	.1905-03	.1552-03	.2149-03	.9900-01	1.025	540.8
8	1.0000	.30000	2.0000	.9900-02	.8000-02	.1110-01	.1527-03	.1244-03	.1722-03	.7900-01	.8420	540.6
8	1.0000	.32500	3.0000	.8800-02	.7200-02	.9900-02	.1362-03	.1110-03	.1536-03	.7100-01	.7270	540.2
8	1.0000	.35000	4.0000	.9200-02	.7500-02	.1040-01	.1429-03	.1165-03	.1611-03	.7400-01	.7710	539.9
8	1.0000	.37500	5.0000	.8500-02	.6900-02	.9500-02	.1307-03	.1065-03	.1474-03	.6800-01	.7140	540.5
8	1.0000	.40000	6.0000	.1100-01	.9000-02	.1240-01	.1702-03	.1387-03	.1919-03	.8800-01	.9090	540.2
8	1.0000	.42500	7.0000	.1420-01	.1150-01	.1600-01	.2188-03	.1784-03	.2468-03	.1140	1.180	540.1
8	1.0000	.45000	8.0000	.1860-01	.1510-01	.2090-01	.2871-03	.2310-03	.3238-03	.1490	1.525	540.3
8	1.0000	.47500	9.0000	.1920-01	.1560-01	.2160-01	.2963-03	.2415-03	.3342-03	.1540	1.566	540.5
8	1.0000	.50000	10.0000	.2550-01	.2080-01	.2880-01	.3947-03	.3217-03	.4451-03	.2050	2.079	540.2
8	1.0000	.52500	11.0000	.3090-01	.2520-01	.3480-01	.4776-03	.3692-03	.5387-03	.2480	2.512	540.7
8	1.0000	.55000	12.0000	.2590-01	.2110-01	.2920-01	.4002-03	.3262-03	.4513-03	.2080	2.089	540.2
8	1.0000	.60000	13.0000	.1450-01	.1180-01	.1630-01	.2242-03	.1828-03	.2528-03	.1160	1.182	539.9
8	1.0000	.65000	14.0000	.9300-02	.7500-02	.1040-01	.1431-03	.1167-03	.1613-03	.7400-01	.7950	539.5
8	1.0000	.70000	15.0000	.6300-02	.5100-02	.7100-02	.9737-04	.7941-04	.1098-03	.5100-01	.4960	538.9
8	1.0000	.75000	16.0000	.4600-02	.3700-02	.5200-02	.7074-04	.5769-04	.7976-04	.3700-01	.3740	538.8
8	1.0000	.80000	17.0000	.2800-02	.2300-02	.3100-02	.4301-04	.3509-04	.4849-04	.2200-01	.2180	538.2
8	2.0000	.85000	18.0000	.1150-01	.9300-02	.1290-01	.1773-03	.1445-03	.2073-03	.9200-01	1.080	540.6
8	2.0000	.33700	19.0000	.1190-01	.9700-02	.1340-01	.1841-03	.1501-03	.2077-03	.9600-01	1.129	540.2
8	2.0000	.39000	20.0000	.1900-01	.1550-01	.2140-01	.2936-03	.2393-03	.3312-03	.1520	1.799	540.5
8	2.0000	.42600	21.0000	.2800-01	.2260-01	.3160-01	.4335-03	.3533-03	.4890-03	.2250	2.640	540.7
8	2.0000	.47800	22.0000	.3100-01	.2520-01	.3490-01	.4789-03	.3903-03	.5402-03	.2480	2.770	540.8

REPRODUCTION OF THE
ORIGINAL DATA

(RV6004)

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) B62C12F10H16H127E52V8R19

R/N NUMBER	TRALE	X/L	T/C NO	H/HREF R=0.5	H/HREF R=1.0	H/HREF R=TAH	H18TO BTU/R FTESEC	H1TO BTU/R FTESEC	H1TAH BTU/R FTESEC	QOOT BTU/ FTESEC	OTWOT DEC. R /SEC	TH DEC. R
8	2.0000	.53000	23.000	.1870-01	.1530-01	.2110-01	.2897-03	.2762-03	.3268-03	.1500	1.678	540.2
8	2.0000	.56700	24.000	.1170-01	.9500-02	.1320-01	.1808-03	.1474-03	.2039-03	.9400-01	1.023	539.5
8	2.0000	.62000	25.000	.8200-02	.6700-02	.9200-02	.1265-03	.1031-03	.1426-03	.6600-01	.7160	539.4
8	2.0000	.67000	26.000	.9300-02	.7600-02	.1050-01	.1439-03	.1174-03	.1623-03	.7500-01	.8170	538.5
8	2.0000	.70500	27.000	.5400-02	.4400-02	.6100-02	.8321-04	.6788-04	.9380-04	.4300-01	.4680	538.1
8	2.0000	.73000	28.000	.3700-02	.3000-02	.4100-02	.5667-04	.4624-04	.5389-04	.3000-01	.3260	537.4
8	2.0000	.80000	29.000	.2600-02	.2200-02	.3000-02	.4094-04	.3340-04	.4614-04	.2100-01	.2360	537.6
8	2.0000	.82400	30.000	.4000-03	.3000-03	.5000-03	.6259-05	.5107-05	.7055-05	.3000-02	.4600-01	537.6
8	3.0000	.20000	31.000	.2740-01	.2230-01	.3090-01	.4237-03	.3451-03	.4781-03	.2190	2.324	542.7
8	3.0000	.22500	32.000	.2250-01	.1830-01	.2530-01	.3472-03	.2829-03	.3918-03	.1800	2.014	541.8
8	3.0000	.25000	33.000	.1740-01	.1420-01	.1970-01	.2697-03	.2198-03	.3043-03	.1400	1.566	541.2
8	3.0000	.27500	34.000	.1360-01	.1110-01	.1530-01	.2101-03	.1713-03	.2370-03	.1090	1.308	540.7
8	3.0000	.30000	35.000	.1220-01	.9900-02	.1380-01	.1887-03	.1538-03	.2129-03	.9900-01	1.215	540.2
8	3.0000	.32500	36.000	.1300-01	.1060-01	.1470-01	.2011-03	.1640-03	.2268-03	.1040	1.227	540.2
8	3.0000	.35000	37.000	.1670-01	.1360-01	.1890-01	.2587-03	.2109-03	.2918-03	.1340	1.561	540.3
8	3.0000	.37500	38.000	.2500-01	.2040-01	.2820-01	.3863-03	.3148-03	.4357-03	.2000	2.354	540.6
8	3.0000	.40000	39.000	.2590-01	.2110-01	.2920-01	.4010-03	.3269-03	.4522-03	.2080	2.458	540.2
8	3.0000	.42500	40.000	.2750-01	.2240-01	.3100-01	.4255-03	.3468-03	.4799-03	.2210	2.619	540.8
8	3.0000	.45000	41.000	.2330-01	.1900-01	.2630-01	.3606-03	.2940-03	.4067-03	.1870	2.144	540.0
8	3.0000	.47500	42.000	.1830-01	.1490-01	.2070-01	.2836-03	.2312-03	.3199-03	.1470	1.643	540.2
8	3.0000	.50000	43.000	.1330-01	.1090-01	.1500-01	.2064-03	.1683-03	.2328-03	.1070	1.197	539.7
8	3.0000	.52500	44.000	.9600-02	.7800-02	.1080-01	.1481-03	.1208-03	.1671-03	.7700-01	.9050	539.4
8	3.0000	.55000	45.000	.8300-02	.6700-02	.9300-02	.1277-03	.1042-03	.1440-03	.6600-01	.7420	539.0
8	3.0000	.58000	46.000	.6000-02	.4900-02	.6800-02	.9337-04	.7616-04	.1053-03	.4900-01	.5300	538.5
8	3.0000	.65000	47.000	.4800-02	.3900-02	.5400-02	.7436-04	.6067-04	.8383-04	.3900-01	.4130	538.0
8	3.0000	.70000	48.000	.2900-02	.2400-02	.3300-02	.4533-04	.3699-04	.5110-04	.2400-01	.2620	537.6
8	3.0000	.75000	49.000	.2600-02	.2100-02	.2900-02	.4033-04	.3291-04	.4545-04	.2100-01	.2300	537.1
8	3.0000	.80000	50.000	.2500-02	.2000-02	.2800-02	.3822-04	.3119-04	.4307-04	.2000-01	.2150	537.0
8	3.0000	.85000	51.000	.4800-02	.4000-02	.5500-02	.7492-04	.6112-04	.8446-04	.3900-01	.4850	538.2
8	3.0000	.87500	52.000	.9000-03	.8000-03	.1000-02	.1425-04	.1162-04	.1608-04	.7000-02	.9200-01	538.5
8	3.0000	.90000	53.000	.1200-02	.1000-02	.1400-02	.1883-04	.1536-04	.2123-04	.1000-01	.1370	538.7
8	3.0000	.92500	54.000	.1500-02	.1200-02	.1700-02	.2341-04	.1909-04	.2639-04	.1200-01	.1600	538.6
8	3.0000	.95000	55.000	.1000-02	.8000-03	.1100-02	.1568-04	.1279-04	.5938-03	.8000-02	.3.089	538.3
8	4.0000	.20000	71.000	.3400-01	.2770-01	.3843-01	.5259-03	.4280-03	.4325-03	.2700	3.089	545.0
8	4.0000	.22500	72.000	.2480-01	.2020-01	.2800-01	.3832-03	.3120-03	.4325-03	.1980	2.320	543.2
8	4.0000	.25000	73.000	.1980-01	.1610-01	.2230-01	.3056-03	.2488-03	.3449-03	.1580	1.851	543.0
8	4.0000	.27500	74.000	.1730-01	.1410-01	.1960-01	.2682-03	.2185-03	.3027-03	.1390	1.718	542.2
8	4.0000	.30000	75.000	.1600-01	.1300-01	.1800-01	.2473-03	.2015-03	.2790-03	.1280	1.681	541.3
8	4.0000	.32500	76.000	.2380-01	.1940-01	.2690-01	.3686-03	.3003-03	.4158-03	.1910	2.505	541.4
8	4.0000	.35000	77.000	.2780-01	.2260-01	.3140-01	.4299-03	.3502-03	.4850-03	.2230	2.920	541.6
8	4.0000	.37500	78.000	.1980-01	.1630-01	.2250-01	.3084-03	.2514-03	.3479-03	.1600	2.099	540.8
8	4.0000	.40000	79.000	.1370-01	.1120-01	.1550-01	.2121-03	.1729-03	.2392-03	.1100	1.444	540.5
8	4.0000	.42500	81.000	.9700-02	.7900-02	.1090-01	.1494-03	.1210-03	.1685-03	.7800-01	1.019	540.0

(RV8004)

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-88A) 862C12F10M16H127E52V8R19

DATE 07 OCT 75

RUN NUMBER	TRA'E	A/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTNOT DEG. R /SEC	TH DEG. R
8	4.0000	.45000	62.000	.7900-02	.6500-02	.8900-02	.1224-03	.9478-04	.1380-03	.6400-01	.8250	540.0
8	4.0000	.47500	63.000	.6600-02	.5400-02	.7500-02	.1023-03	.8340-04	.1153-03	.5300-01	.6780	539.6
8	4.0000	.50000	64.000	.5100-02	.4100-02	.5700-02	.7863-04	.6411-04	.9866-04	.4100-01	.5070	539.4
8	4.0000	.52500	65.000	.4300-02	.3500-02	.4900-02	.6666-04	.5452-04	.7540-04	.3500-01	.4310	539.3
8	4.0000	.55000	66.000	.3800-02	.3100-02	.4300-02	.5903-04	.4814-04	.6656-04	.3100-01	.3610	539.0
8	4.0000	.60000	67.000	.2700-02	.2200-02	.3100-02	.4253-04	.3469-04	.4794-04	.2200-01	.2500	538.2
8	4.0000	.65000	68.000	.1400-02	.1200-02	.1600-02	.2229-04	.1818-04	.2512-04	.1200-01	.1370	538.3
8	4.0000	.70000	69.000	.6000-03	.5000-03	.6000-03	.8858-05	.7225-05	.9966-05	.5000-02	.5200-01	538.4
8	4.0000	.75000	70.000	.1800-02	.1500-02	.2100-02	.2828-04	.2308-04	.3187-04	.1500-01	.1650	537.4
8	4.0000	.80000	75.000	.7000-03	.5000-03	.8000-03	.1037-04	.8462-05	.1169-04	.5000-02	.6500-01	537.8
8	4.0000	.90000	78.000	.1000-03	.1000-03	.1000-03	.1940-05	.1583-05	.2187-05	.1000-02	.1300-01	537.7
8	4.0000	.92500	79.000	.3700-02	.3000-02	.4100-02	.5696-04	.4646-04	.6421-04	.3000-01	.3680	538.5
8	4.0000	.95000	80.000	.1600-02	.1300-02	.1800-02	.2458-04	.2005-04	.2772-04	.0000	.0000	583.3

(RV800V)

ORBITER FUSELAGE PORT SIDE

DATE 37 OCT 75

OH-74 (AEDC V41B-88A) 862C12F10M16H127E52V8R19

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = -1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TC DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
9	7.880	29.83	82.60	1177.	90.19	-1.100	87.70	.9000-02	.4060	3516.	.8927-05	.7062-07

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H11AM BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	QDOT DEG. R /SEC	TH DEG. R
9	1.0000	.27500	1.0000	.1550-01	.1270-01	.1750-01	.2383-03	.1945-03	.2685-03	.1250	1.296	536.3
9	1.0000	.30000	2.0000	.1220-01	.1000-01	.1380-01	.1879-03	.1533-03	.2117-03	.9800-01	1.047	536.1
9	1.0000	.32500	3.0000	.1010-01	.8300-02	.1140-01	.1555-03	.1269-03	.1752-03	.8100-01	.8390	536.1
9	1.0000	.35000	4.0000	.1180-01	.9600-02	.1320-01	.1808-03	.1476-03	.2037-03	.9500-01	.9850	535.8
9	1.0000	.37500	5.0000	.1150-01	.9400-02	.1300-01	.1769-03	.1444-03	.1993-03	.9200-01	.9760	536.5
9	1.0000	.40000	6.0000	.1850-01	.1510-01	.2090-01	.2852-03	.2328-03	.3214-03	.1490	1.536	536.7
9	1.0000	.42500	7.0000	.1870-01	.1530-01	.2110-01	.2878-03	.2349-03	.3244-03	.1500	1.562	537.3
9	1.0000	.45000	8.0000	.2120-01	.1730-01	.2390-01	.3260-03	.2660-03	.3674-03	.1700	1.745	537.4
9	1.0000	.47500	9.0000	.2410-01	.1970-01	.2720-01	.3710-03	.3027-03	.4183-03	.1930	1.973	537.9
9	1.0020	.50000	10.000	.2250-01	.1830-01	.2530-01	.3456-03	.2819-03	.3895-03	.1800	1.830	537.9
9	1.0000	.52500	11.000	.1660-01	.1360-01	.1870-01	.2554-03	.2084-03	.2878-03	.1330	1.354	537.4
9	1.0000	.55000	12.000	.1430-01	.1170-01	.1610-01	.2199-03	.1795-03	.2479-03	.1150	1.157	537.1
9	1.0000	.57500	13.000	.9800-02	.7200-02	.9900-02	.1356-03	.1107-03	.1529-03	.7100-01	.7200	537.2
9	1.0000	.60000	14.000	.8300-02	.6800-02	.9300-02	.1275-03	.1040-03	.1437-03	.6700-01	.6760	537.2
9	1.0000	.62500	15.000	.6300-02	.5100-02	.7100-02	.9679-04	.7899-04	.1091-03	.5100-01	.4960	536.9
9	1.0000	.65000	16.000	.3100-02	.2600-02	.3500-02	.4818-04	.3932-04	.5430-04	.2500-01	.2560	537.0
9	1.0000	.67500	17.000	.1900-02	.1600-02	.2200-02	.2989-04	.2439-04	.3368-04	.1600-01	.1520	536.9
9	1.0000	.70000	18.000	.1610-01	.1320-01	.1820-01	.2478-03	.2023-03	.2702-03	.1300	1.527	535.8
9	2.0000	.72500	19.000	.1430-01	.1170-01	.1610-01	.2198-03	.1795-03	.2477-03	.1150	1.364	535.3
9	2.0000	.75000	20.000	.2830-01	.2310-01	.3190-01	.4351-03	.3551-03	.4903-03	.2270	2.691	536.5
9	2.0000	.77500	21.000	.2690-01	.2200-01	.3030-01	.4140-03	.3379-03	.4666-03	.2160	2.544	537.0
9	2.0000	.80000	22.000	.1850-01	.1510-01	.2090-01	.2847-03	.2324-03	.3208-03	.1490	1.664	536.6

DATE 07 OCT 75

04-7N (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 290

04-7N (AEDC V41B-88A) B02C12F10H18W17E75S0V0R18

(RV8004)

RUN NUMBER	TRAJ'E	X/L	T/C NO	H/WREF R=0.9	H/WREF R=1.0	H/WREF R-TAM	H(9T) R FT2SEC	H(10) R FT2SEC	H(11) R FT2SEC	QOOT BTU/ FT2SEC	DTNOT DEG. R /SEC	TN DEG. R
9	2.0000	53000	23.000	.1260-01	.1020-01	.1410-01	.1931-03	.1476-03	.2175-03	.1010	1.129	536.5
9	2.0000	56700	24.000	.9300-02	.7800-02	.1050-01	.1426-03	.1165-03	.1609-03	.7500-01	.8140	536.5
9	2.0000	62000	25.000	.6700-02	.5500-02	.7800-02	.1031-03	.8417-04	.1182-03	.5400-01	.5880	536.6
9	2.0000	67000	26.000	.3800-02	.3100-02	.4300-02	.5903-04	.4818-04	.6851-04	.3100-01	.3370	536.6
9	2.0000	70500	27.000	.3500-02	.2800-02	.3900-02	.5339-04	.4359-04	.6016-04	.2600-01	.3020	536.1
9	2.0000	75000	28.000	.2700-02	.2200-02	.3100-02	.4193-04	.3423-04	.4724-04	.2200-01	.2420	535.7
9	2.0000	80000	29.000	.1300-02	.1100-02	.1500-02	.1966-04	.1621-04	.2237-04	.1000-01	.1150	536.1
9	2.0000	82400	30.000	.2000-03	.1000-03	.2000-03	.2678-05	.2185-05	.3017-05	.1000-02	.2000-01	536.6
9	3.0000	20000	31.000	.2900-01	.2370-01	.3270-01	.4466-03	.3542-03	.5035-03	.2320	2.471	539.1
9	3.0000	22500	32.000	.2410-01	.1970-01	.2720-01	.3705-03	.3024-03	.4177-03	.1930	2.172	537.5
9	3.0000	25000	33.000	.2030-01	.1660-01	.2290-01	.3126-03	.2552-03	.3523-03	.1630	1.836	536.5
9	3.0000	27500	34.000	.1610-01	.1310-01	.1810-01	.2468-03	.2015-03	.2780-03	.1290	1.555	535.5
9	3.0000	30000	35.000	.1400-01	.1140-01	.1570-01	.2146-03	.1753-03	.2417-03	.1130	1.399	535.0
9	3.0000	32500	36.000	.1650-01	.1350-01	.1860-01	.2539-03	.2073-03	.2860-03	.1330	1.567	535.2
9	3.0000	35000	37.000	.2550-01	.2080-01	.2870-01	.3919-03	.3200-03	.4415-03	.2050	2.391	535.8
9	3.0000	37500	38.000	.2950-01	.2410-01	.3330-01	.4542-03	.3707-03	.5117-03	.2580	2.796	536.3
9	3.0000	40000	39.000	.1900-01	.1550-01	.2140-01	.2917-03	.2382-03	.3287-03	.1530	1.808	535.8
9	3.0000	42500	40.000	.1840-01	.1500-01	.2070-01	.2825-03	.2307-03	.3183-03	.1460	1.760	535.9
9	3.0000	45000	41.000	.1430-01	.1170-01	.1610-01	.2203-03	.1799-03	.2482-03	.1150	1.325	535.4
9	3.0000	47500	42.000	.1190-01	.9700-02	.1340-01	.1833-03	.1497-03	.2065-03	.9600-01	1.074	535.6
9	3.0000	50000	43.000	.9700-02	.7900-02	.1090-01	.1494-03	.1220-03	.1684-03	.7800-01	.8750	535.9
9	3.0000	52500	44.000	.7500-02	.6100-02	.8400-02	.1149-03	.9384-04	.1295-03	.6000-01	.7090	535.6
9	3.0000	55000	45.000	.6600-02	.5400-02	.7500-02	.1021-03	.8333-04	.1150-03	.5300-01	.5980	535.6
9	3.0000	57500	46.000	.5100-02	.4200-02	.5600-02	.7905-04	.6454-04	.8906-04	.4100-01	.4520	535.8
9	3.0000	60000	47.000	.3500-02	.2900-02	.4000-02	.5427-04	.4431-04	.6115-04	.2800-01	.3030	535.9
9	3.0000	62500	48.000	.2600-02	.2100-02	.2900-02	.4015-04	.3278-04	.4523-04	.2100-01	.2330	535.8
9	3.0000	65000	49.000	.1500-02	.1200-02	.1600-02	.2239-04	.1828-04	.2523-04	.1200-01	.1280	535.8
9	3.0000	67500	50.000	.1400-02	.1100-02	.1600-02	.2127-04	.1736-04	.2397-04	.1100-01	.1200	536.3
9	3.0000	70000	51.000	.7000-03	.6000-03	.8000-03	.1147-04	.9356-05	.1292-04	.6000-02	.7400-01	537.4
9	3.0000	72500	52.000	.6000-03	.5000-03	.6000-03	.8504-05	.6939-05	.9585-05	.4000-02	.5500-01	537.5
9	3.0000	75000	53.000	.3000-03	.3000-03	.4000-03	.5009-05	.4087-05	.5647-05	.3000-02	.3600-01	537.8
9	3.0000	77500	54.000	.7000-03	.6000-03	.8000-03	.1073-04	.8754-05	.1209-04	.6000-02	.7400-01	537.7
9	3.0000	80000	55.000	.6000-03	.5000-03	.7000-03	.9037-05	.7374-05	.1019-04	.5000-02	.4000-01	537.5
9	4.0000	20000	71.000	.3410-01	.2780-01	.3840-01	.5238-03	.4269-03	.5908-03	.2720	3.109	540.7
9	4.0000	22500	72.000	.2630-01	.2140-01	.2960-01	.4037-03	.3293-03	.4551-03	.2100	2.474	538.2
9	4.0000	25000	73.000	.1890-01	.1540-01	.2130-01	.2903-03	.2369-03	.3272-03	.1510	1.782	537.5
9	4.0000	27500	74.000	.1870-01	.1530-01	.2110-01	.2880-03	.2350-03	.3245-03	.1500	1.869	537.0
9	4.0000	30000	75.000	.1930-01	.1570-01	.2170-01	.2961-03	.2417-03	.3336-03	.1550	2.039	536.0
9	4.0000	32500	76.000	.2510-01	.2050-01	.2820-01	.3855-03	.3146-03	.4344-03	.2020	2.651	536.5
9	4.0000	35000	77.000	.1980-01	.1620-01	.2240-01	.3050-03	.2490-03	.3437-03	.1600	2.101	535.9
9	4.0000	37500	78.000	.1370-01	.1120-01	.1550-01	.2113-03	.1726-03	.2381-03	.1110	1.457	535.6
9	4.0000	40000	79.000	.1030-01	.8400-02	.1170-01	.1590-03	.1299-03	.1792-03	.8300-01	1.096	535.5
9	4.0000	42500	81.000	.8100-02	.6600-02	.9200-02	.1252-03	.1022-03	.1411-03	.6600-01	.8630	535.7

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75		HEATING DATA ON ORBITER FUSELAGE PORT SIDE										PAGE 391
RUN NUMBER		OH-74 (AEDC V41B-B8A) 862C12F10M18M127E52VBR19 (RV300N)										
		W/HREF R=0.9	W/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R		
9	4.0000	.6600-02	.5300-02	.7400-02	.1007-03	.8223-04	.1135-03	.5300-01	.6860	535.8		
9	4.0000	.5700-02	.4700-02	.6500-02	.8805-04	.7189-04	.9821-04	.4600-01	.5890	535.8		
9	4.0000	.4700-02	.3800-02	.5300-02	.7195-04	.5874-04	.8106-04	.3800-01	.4680	535.9		
9	4.0000	.3700-02	.3100-02	.4200-02	.5748-04	.4682-04	.6476-04	.3000-01	.3740	536.2		
9	4.0000	.3400-02	.2800-02	.3800-02	.5181-04	.4229-04	.5839-04	.2700-01	.3190	536.4		
9	4.0000	.2400-02	.1900-02	.2700-02	.3672-04	.2997-04	.4138-04	.1900-01	.2170	536.3		
9	4.0000	.1600-02	.1300-02	.1800-02	.2411-04	.1968-04	.2717-04	.1300-01	.1480	536.6		
9	4.0000	.5000-03	.4000-03	.6000-03	.7648-05	.6241-05	.8620-05	.4000-02	.4500-01	537.3		
9	4.0000	.1000-02	.8000-03	.1100-02	.1564-04	.1277-04	.1763-04	.8000-02	.9100-01	536.6		
9	4.0000	.3000-03	.3000-03	.4000-03	.4924-05	.4018-05	.5550-05	.3000-02	.3100-01	537.2		
9	4.0000	.4000-03	.3000-03	.5000-03	.6376-05	.5204-05	.7185-05	.3000-02	.4400-01	536.8		
9	4.0000	.1000-02	.8000-03	.1100-02	.1519-04	.1240-04	.1712-04	.8000-02	.1030	537.2		
9	4.0000	.1000-03	.1000-03	.1000-03	.1556-05	.1270-05	.1754-05	.1000-02	.1000-01	537.2		
9	4.0000	.1600-02	.1300-02	.1800-02	.2458-04	.2035-04	.2772-04	.0000	.0000	563.3		

DATE 07 OCT 75

0M-7M (AEDC W418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 292

0M-7M (AEDC W418-88A) 862C12F10H18H127E32V6R19

(RV8004)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = -1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	Y DEG. R	P PSIA	Q PSIA	V FT/SEC	RNO SLUGS /FT ³	MU LB-SEC /FT ²
10	7.880	34.74	82.20	1177.	-168.7	-1.000	87.70	.9000-02	.4040	3816.	.8883-03	.7062-07

RUN NUMBER	RM/L	W-REF BTU/ R FT ² SEC	STN NO R=
10	.4548	.1534-01	.6010-01

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	W/REF R=0.9	W/REF R=1.0	W/REF R-TAN	H1970 BTU/ R FT ² SEC	H170 BTU/ R FT ² SEC	H17AM BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTMDT DEG. R /SEC	TH DEG. R
10	1.0000	.27500	1.0000	.1410-01	.1150-01	.1550-01	.2167-03	.1770-03	.2441-03	.1140	1.181	535.5
10	1.0000	.30000	2.0000	.1210-01	.0900-02	.1370-01	.1861-03	.1520-03	.2097-03	.9800-01	1.040	535.1
10	1.0000	.32500	3.0000	.0600-02	.7800-02	.1080-01	.1470-03	.1200-03	.1655-03	.7700-01	.7950	534.9
10	1.0000	.35000	4.0000	.1160-01	.0900-02	.1300-01	.1777-03	.1451-03	.2001-03	.9300-01	.9700	534.9
10	1.0000	.37500	5.0000	.1580-01	.1290-01	.1780-01	.2418-03	.1974-03	.2724-03	.1270	1.337	535.4
10	1.0000	.40000	6.0000	.2010-01	.1640-01	.2260-01	.3078-03	.2514-03	.3467-03	.1610	1.664	535.2
10	1.0000	.42500	7.0000	.1720-01	.1400-01	.1940-01	.2636-03	.2153-03	.2970-03	.1380	1.438	535.2
10	1.0000	.45000	8.0000	.2180-01	.1780-01	.2460-01	.3346-03	.2732-03	.3769-03	.1750	1.800	535.3
10	1.0000	.47500	9.0000	.1570-01	.1280-01	.1760-01	.2403-03	.1962-03	.2706-03	.1260	1.287	535.2
10	1.0000	.50000	10.000	.1280-01	.1050-01	.1450-01	.1989-03	.1608-03	.2218-03	.1030	1.051	534.8
10	1.0000	.52500	11.000	.1430-01	.1170-01	.1610-01	.1789-03	.1789-03	.2468-03	.1150	1.169	534.9
10	1.0000	.55000	12.000	.1090-01	.0900-02	.1230-01	.1669-03	.1363-03	.1880-03	.8700-01	.6820	535.0
10	1.0000	.60000	13.000	.0400-02	.6900-02	.9500-02	.1292-03	.1055-03	.1455-03	.6800-01	.6890	534.9
10	1.0000	.65000	14.000	.7500-02	.6100-02	.8400-02	.1146-03	.9359-04	.1291-03	.6000-01	.6110	535.0
10	1.0000	.70000	15.000	.4100-02	.3300-02	.4600-02	.6217-04	.5078-04	.7003-04	.3300-01	.3200	534.9
10	1.0000	.80000	17.000	.8000-03	.7000-03	.1000-02	.1295-04	.1052-04	.1459-04	.7000-02	.6500-01	535.5
10	2.0000	.28500	18.000	.1460-01	.1190-01	.1640-01	.2233-03	.1874-03	.2515-03	.1170	1.381	534.6
10	2.0000	.33700	19.000	.1610-01	.1320-01	.1820-01	.2473-03	.2021-03	.2775-03	.1300	1.539	534.0
10	2.0000	.39000	20.000	.2140-01	.1750-01	.2410-01	.3286-03	.2684-03	.3700-03	.1730	2.045	534.1
10	2.0000	.42600	21.000	.1950-01	.1590-01	.2200-01	.2991-03	.2443-03	.3368-03	.1570	1.848	534.8
10	2.0000	.47800	22.000	.1290-01	.1050-01	.1450-01	.1979-03	.1616-03	.2228-03	.1040	1.164	533.9
10	2.0000	.53000	23.000	.1030-01	.0400-02	.1160-01	.1580-03	.1290-03	.1779-03	.8300-01	.9290	534.1

(RV8004)

DATE 07 OCT 73

OH-7N (AEDC W418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-7N (AEDC W418-B8A) 862C12F10M16M127E52V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAM	H1970 BTU/R FT2SEC	H1010 BTU/R FT2SEC	H17AM BTU/R FT2SEC	QDOT BTU/ FT2SEC	DTNOT DEG. R /SEC	TH DEG. R
10	2.0000	.56700	24.000	.7500-02	.6100-02	.8500-02	.1152-03	.9413-04	.1298-03	.6100-01	.6610	534.1
10	2.0000	.62000	25.000	.6100-02	.5000-02	.6900-02	.9389-04	.7670-04	.1057-03	.4900-01	.5390	534.1
10	2.0000	.67000	26.000	.4000-03	.4000-03	.5000-03	.5825-05	.5576-05	.7686-05	.4000-02	.3900-01	533.8
10	2.0000	.70500	27.000	.6000-03	.5000-03	.7000-03	.9719-05	.7941-05	.1094-04	.5000-02	.9500-01	533.7
10	2.0000	.70000	28.000	.6000-02	.1300-02	.1800-02	.2402-04	.9633-04	.2705-04	.1300-01	.1390	533.8
10	2.0000	.80000	29.000	.7000-03	.6000-03	.8000-03	.1086-04	.6872-05	.1223-04	.6000-02	.6300-01	534.6
10	3.0000	.20000	31.000	.2800-01	.2280-01	.3150-01	.4292-03	.3502-03	.4828-03	.2240	2.382	537.9
10	3.0000	.22500	32.000	.2560-01	.2090-01	.2890-01	.3930-03	.3208-03	.4428-03	.2060	2.310	536.3
10	3.0000	.25000	33.000	.1980-01	.1610-01	.2230-01	.3033-03	.2477-03	.3417-03	.1590	1.787	535.3
10	3.0000	.27500	34.000	.1530-01	.1250-01	.1730-01	.2354-03	.1923-03	.2651-03	.1240	1.488	534.2
10	3.0000	.30000	35.000	.1430-01	.1170-01	.1610-01	.2189-03	.1788-03	.2464-03	.1150	1.432	533.5
10	3.0000	.32500	36.000	.2060-01	.1680-01	.2320-01	.3155-03	.2578-03	.3553-03	.1660	1.954	533.6
10	3.0000	.35000	37.000	.2470-01	.2020-01	.2780-01	.3792-03	.3098-03	.4270-03	.1990	2.325	533.7
10	3.0000	.37500	38.000	.1930-01	.1620-01	.2240-01	.3048-03	.2491-03	.3433-03	.1600	1.888	533.1
10	3.0000	.40000	39.000	.1400-01	.1140-01	.1570-01	.2141-03	.1750-03	.2411-03	.1130	1.335	533.2
10	3.0000	.42500	40.000	.1370-01	.1120-01	.1550-01	.2108-03	.1722-03	.2373-03	.1110	1.321	533.3
10	3.0000	.45000	41.000	.1100-01	.9000-02	.1240-01	.1694-03	.1394-03	.907-03	.8900-01	1.024	533.3
10	3.0000	.47500	42.000	.1050-01	.8600-02	.1180-01	.1608-03	.1314-03	.1811-03	.8500-01	.9480	533.2
10	3.0000	.50000	43.000	.7800-02	.6400-02	.9800-02	.1200-03	.9809-04	.1352-03	.6300-01	.7070	533.5
10	3.0000	.52500	44.000	.6300-02	.5100-02	.7100-02	.9645-04	.7882-04	.1086-03	.5100-01	.5980	533.1
10	3.0000	.55000	45.000	.5800-02	.4600-02	.6600-02	.8934-04	.7301-04	.1006-03	.4700-01	.5270	533.1
10	3.0000	.60000	46.000	.4600-02	.3700-02	.5100-02	.7010-04	.5729-04	.7893-04	.3700-01	.4030	533.2
10	3.0000	.65000	47.000	.3800-02	.3100-02	.4300-02	.5901-04	.4821-04	.6644-04	.3100-01	.3310	533.5
10	3.0000	.70000	48.000	.1900-02	.1500-02	.2100-02	.2843-04	.2322-04	.3201-04	.1500-01	.1660	533.7
10	3.0000	.75000	49.000	.1000-02	.8000-03	.1100-02	.1523-04	.1244-04	.1715-04	.8000-02	.8700-01	533.8
10	3.0000	.80000	50.000	.8000-03	.7000-03	.9000-03	.1272-04	.1039-04	.1432-04	.7000-02	.7200-01	534.6
10	3.0000	.85000	51.000	.5000-03	.4000-03	.5000-03	.7349-05	.5599-05	.8282-05	.4000-02	.4800-01	536.6
10	3.0000	.90000	52.000	.3000-03	.3000-03	.4000-03	.5002-05	.4082-05	.5637-05	.3000-02	.3700-01	527.0
10	3.0000	.92500	54.000	.3000-03	.3000-03	.4000-03	.5315-05	.4337-05	.5990-05	.3000-02	.3700-01	537.0
10	3.0000	.95000	55.000	.4200-03	.3000-03	.5000-03	.6520-05	.5328-05	.7357-05	.3000-02	.3500-01	536.9
10	4.0000	.20000	71.000	.3100-01	.2550-01	.3520-01	.4791-03	.3907-03	.5402-03	.2490	2.856	538.8
10	4.0000	.22500	72.000	.2520-01	.2050-01	.2840-01	.3861-03	.3152-03	.4741-03	.2020	2.376	536.5
10	4.0000	.25000	73.000	.2010-01	.1640-01	.2260-01	.3076-03	.2512-03	.3503-03	.1610	1.898	535.5
10	4.0000	.27500	74.000	.1860-01	.1530-01	.2100-01	.2873-03	.2335-03	.3211-03	.1500	1.863	535.2
10	4.0000	.30000	75.000	.2120-01	.1730-01	.2390-01	.3253-03	.2657-03	.3663-03	.1710	2.250	534.1
10	4.0000	.32500	77.000	.1910-01	.1590-01	.2150-01	.2977-03	.2432-03	.3352-03	.1560	2.061	533.7
10	4.0000	.35000	78.000	.1390-01	.1130-01	.1560-01	.2130-03	.1741-03	.2599-03	.1120	1.476	533.5
10	4.0000	.37500	79.000	.1120-01	.9200-02	.1260-01	.1718-03	.1404-03	.1935-03	.9000-01	1.191	533.4
10	4.0000	.40000	80.000	.8400-02	.6800-02	.9400-02	.1284-03	.1049-03	.1445-03	.6700-01	.8890	533.5
10	4.0000	.42500	81.000	.7000-02	.5700-02	.7900-02	.1075-03	.8795-03	.1211-03	.5700-01	.7450	533.3
10	4.0000	.45000	82.000	.5100-02	.4100-02	.5700-02	.7760-04	.6358-04	.8761-04	.4100-01	.5330	533.3
10	4.0000	.47500	83.000	.4700-02	.3900-02	.5300-02	.7275-04	.5945-04	.8192-04	.3800-01	.4900	533.4
10	4.0000	.50000	84.000	.3500-02	.2900-02	.3900-02	.5362-04	.4381-04	.6037-04	.2800-01	.3510	533.4

DATE 07 OCT 75

OH-74 (AEDC V41B-BBA) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 294

OH-74 (AEDC V41B-BBA) 862C12F10M16H127E52VER19 (RVB004)

RUN NUMBER	TRAVE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(9TO) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAM) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
10	4.0000	.2500	65.000	.3400-02	.2800-02	.3900-02	.5253-04	.4291-04	.5915-04	.2800-01	.3430	533.7
10	4.0000	.55000	66.000	.2400-02	.2000-02	.2700-02	.3719-04	.3039-04	.4188-04	.2000-01	.2300	533.8
10	4.0000	.60000	67.000	.1400-02	.1200-02	.1600-02	.2174-04	.1776-04	.2448-04	.1100-01	.1290	534.1
10	4.0000	.65000	68.000	.1900-02	.1600-02	.2200-02	.2955-04	.2414-04	.3329-04	.1600-01	.1830	534.6
10	4.0000	.70000	69.000	.3000-03	.2000-03	.3000-03	.3850-05	.3144-05	.4337-05	.2000-02	.2300-01	535.2
10	4.0000	.80000	75.000	.2000-03	.2000-03	.2400-03	.2880-05	.2351-05	.3244-05	.2000-02	.1800-01	535.9
10	4.0000	.85000	76.000	.2800-02	.2300-02	.3100-02	.4255-04	.3475-04	.4792-04	.2200-01	.2660	534.6
10	4.0000	.87500	77.000	.3000-03	.2000-03	.3000-03	.4112-05	.3357-05	.4633-05	.2000-02	.2800-01	535.9
10	4.0000	.90000	78.000	.1000-02	.8000-03	.1100-02	.1519-04	.1240-04	.1712-04	.8000-02	.1030	537.2
10	4.0000	.92500	79.000	.1500-02	.1500-02	.1700-02	.2252-04	.1839-04	.2538-04	.1200-01	.1460	536.2
10	4.0000	.95000	80.000	.1600-02	.1300-02	.1800-02	.2458-04	.2005-04	.2772-04	.0000	.0000	583.3

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 295

OH-74 (AEDC V41B-B8A) 562C12F10M16M127E52V8R19

(RV8004)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = -1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
11	7.880	43.84	82.80	1177.	-175.8	-1.000	07.70	.9000-02	.4070	3616.	.8946-05	.7062-07

RUN NUMBER	RN/L	STN NO	R _h	FT/SEC	FT
11	.4581	.5989-01			

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(10) BTU/ R FT/SEC	H(10) BTU/ R FT/SEC	H(10) BTU/ R FT/SEC	QDOT BTU/ R FT/SEC	DT/WT DEG. R /SEC	TW DEG. R
11	1.0000	.27500	1.0000	.1340-01	.1100-01	.1510-01	.2067-03	.1686-03	.2329-03	.1080	1.122	537.3
11	1.0000	.30000	2.0000	.1210-01	.0900-02	.1370-01	.1865-03	.1522-03	.2101-03	.9700-01	1.037	537.0
11	1.0000	.32500	3.0000	.1260-01	.1030-01	.1420-01	.1933-03	.1578-03	.2178-03	.1010	1.041	536.7
11	1.0000	.35000	4.0000	.1630-01	.1490-01	.2060-01	.2818-03	.2300-03	.3176-03	.1470	1.531	537.0
11	1.0000	.37500	5.0000	.1640-01	.1340-01	.1850-01	.2531-03	.2065-03	.2853-03	.1320	1.392	537.5
11	1.0000	.40000	6.0000	.1760-01	.1430-01	.1980-01	.2702-03	.2205-03	.3045-03	.1410	1.453	537.2
11	1.0000	.42500	7.0000	.1930-01	.1580-01	.2180-01	.2971-03	.2424-03	.3349-03	.1550	1.611	537.6
11	1.0000	.45000	8.0000	.1570-01	.1280-01	.1770-01	.2420-03	.1975-03	.2727-03	.1260	1.296	537.0
11	1.0000	.47500	9.0000	.1540-01	.1260-01	.1740-01	.2373-03	.1936-03	.2674-03	.1240	1.265	537.2
11	1.0000	.50000	10.000	.1490-01	.1220-01	.1680-01	.2292-03	.1871-03	.2583-03	.1200	1.217	536.9
11	1.0000	.52500	11.000	.1260-01	.1030-01	.1420-01	.1944-03	.1586-03	.2190-03	.1020	1.032	536.7
11	1.0000	.55000	12.000	.1010-01	.8300-02	.1140-01	.1561-03	.1274-03	.1760-03	.8200-01	.9220	536.8
11	1.0000	.60000	13.000	.7900-02	.6500-02	.8900-02	.1217-03	.9837-04	.1372-03	.6400-01	.6470	536.5
11	1.0000	.65000	14.000	.3300-02	.2700-02	.3703-02	.5034-04	.4110-04	.5672-04	.2600-01	.2680	535.9
11	1.0000	.70000	15.000	.1300-02	.1100-02	.1500-02	.2076-04	.1695-04	.2339-04	.1100-01	.1070	535.5
11	1.0000	.75000	16.000	.2000-02	.1500-02	.2200-02	.3032-04	.2476-04	.3415-04	.1600-01	.1620	535.0
11	1.0000	.80000	17.000	.1800-02	.1500-02	.2100-02	.2832-04	.2312-04	.3191-04	.1500-01	.1440	536.2
11	1.0000	.85000	18.000	.1440-01	.1170-01	.1620-01	.209-03	.1803-03	.2470-03	.1150	1.358	537.1
11	2.0000	.33700	19.000	.2220-01	.1810-01	.2500-01	.3421-03	.2792-03	.3855-03	.1790	2.113	537.1
11	2.0000	.39000	20.000	.1970-01	.1610-01	.2220-01	.3030-03	.2473-03	.3415-03	.1580	1.871	537.3
11	2.0000	.42600	21.000	.1520-01	.1240-01	.1720-01	.2347-03	.1915-03	.2645-03	.1220	1.441	537.3
11	2.0000	.47800	22.000	.1230-01	.1010-01	.1390-01	.1900-03	.1551-03	.2141-03	.9900-01	1.111	536.6

DATE 07 OCT 75

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 298

0-1 (AEDC V41B-88A) 862C12F10M16W127E52V8.19

(RV8004)

RUN NUMBER	TRAIE	X/L	T/C NO	H/H REF R=0.9	H/H REF R=1.0	H/H REF R=TAM	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QOOT BTU/ FT2SEC	QOOT DEG. R /SEC	TW DEG. R
11	2.0000	.53000	23.000	.7500-02	.6100-02	.8400-02	.1151-03	.9391-04	.1297-03	.6000-01	.8720	538.6
11	2.0000	.56700	24.000	.6800-02	.5500-02	.7600-02	.1041-03	.8496-04	.1173-03	.5400-01	.5940	536.2
11	2.0000	.62000	25.000	.3900-02	.3200-02	.4400-02	.6021-04	.4916-04	.6783-04	.3200-01	.3440	535.8
11	2.0000	.70500	27.000	.1000-03	.1000-03	.1000-03	.1935-05	.1581-05	.2180-05	.1000-02	.1100-01	534.4
11	2.0000	.75000	28.000	.1500-02	.1200-02	.1700-02	.2291-04	.1871-04	.2580-04	.1200-01	.1330	534.6
11	2.0000	.80000	29.000	.1000-02	.8000-03	.1200-02	.1577-04	.1288-04	.1776-04	.8000-02	.9200-01	535.0
11	2.0000	.83400	30.000	.4000-03	.4000-03	.5000-03	.6883-05	.5620-05	.7754-05	.4000-02	.5000-01	535.6
11	3.0000	.20000	31.000	.2820-01	.2300-01	.3180-01	.4338-03	.3538-03	.4891-03	.2250	2.400	539.1
11	3.0000	.22500	32.000	.2340-01	.1910-01	.2640-01	.3603-03	.2939-03	.4062-03	.1880	2.109	538.1
11	3.0000	.25000	33.000	.1870-01	.1530-01	.2110-01	.2882-03	.2351-03	.3248-03	.1500	1.689	537.6
11	3.0000	.27500	34.000	.1590-01	.1300-01	.1790-01	.2447-03	.1997-03	.2757-03	.1280	1.536	537.0
11	3.0000	.30000	35.000	.1780-01	.1450-01	.2010-01	.2743-03	.2239-03	.3091-03	.1430	1.780	536.8
11	3.0000	.32500	36.000	.2260-01	.1850-01	.2450-01	.3480-03	.2840-03	.3921-03	.1820	2.140	536.8
11	3.0000	.35000	37.000	.1850-01	.1510-01	.2080-01	.2852-03	.2328-03	.3215-03	.1490	1.736	536.8
11	3.0000	.37500	38.000	.1790-01	.1460-01	.2020-01	.2755-03	.2249-03	.3170-03	.1440	1.694	536.8
11	3.0000	.40000	39.000	.1250-01	.1020-01	.1410-01	.1926-03	.1572-03	.2105-03	.1010	1.192	536.1
11	3.0000	.42500	40.000	.1080-01	.8800-02	.1210-01	.1658-03	.1353-03	.1868-03	.8700-01	1.032	536.1
11	3.0000	.45000	41.000	.9400-02	.7700-02	.1060-01	.1452-03	.1185-03	.1636-03	.7600-01	.8710	536.1
11	3.0000	.47500	42.000	.8700-02	.7100-02	.9900-02	.1346-03	.1099-03	.1517-03	.7000-01	.7680	536.0
11	3.0000	.50000	43.000	.5500-02	.4000-02	.6200-02	.8478-04	.6921-04	.9552-04	.4400-01	.4960	536.0
11	3.0000	.52500	44.000	.4900-02	.3700-02	.5000-02	.6894-04	.5630-04	.8523-04	.4000-01	.4670	535.5
11	3.0000	.55000	45.000	.4500-02	.3000-03	.4000-02	.6000-04	.4600-04	.7767-04	.3600-01	.4040	535.4
11	3.0000	.57500	46.000	.3000-02	.2400-02	.3400-02	.4600-04	.3757-04	.5182-04	.2400-01	.2630	535.0
11	3.0000	.60000	47.000	.1100-02	.9000-03	.1300-02	.1763-04	.1440-04	.1985-04	.2000-02	.9900-01	534.8
11	3.0000	.62500	48.000	.1500-02	.1300-02	.1700-02	.2365-04	.1932-04	.2664-04	.1200-01	.1370	534.7
11	3.0000	.65000	49.000	.1000-02	.8000-03	.1200-02	.1576-04	.1287-04	.1775-04	.8000-02	.9000-01	534.6
11	3.0000	.67500	50.000	.4000-03	.3000-03	.4000-03	.6069-05	.4957-05	.6836-05	.3000-02	.3400-01	534.7
11	3.0000	.70000	51.000	.5000-03	.4000-03	.5000-03	.7479-05	.6106-05	.8427-05	.4000-02	.4900-01	536.0
11	3.0000	.72500	52.000	.9000-03	.7000-03	.1000-02	.1377-04	.1124-04	.1551-04	.7000-02	.8900-01	536.3
11	3.0000	.75000	53.000	.8000-03	.6000-03	.9000-03	.1165-04	.9510-05	.1313-04	.6000-02	.8500-01	536.5
11	3.0000	.77500	54.000	.1300-02	.1100-02	.1500-02	.2026-04	.1654-04	.2283-04	.1100-01	.1390	536.6
11	3.0000	.80000	55.000	.1200-02	.9000-03	.1300-02	.1784-04	.1456-04	.2010-04	.9000-02	.9500-01	536.5
11	4.0000	.22500	71.000	.2910-01	.2370-01	.3280-01	.4480-03	.3652-03	.5053-03	.2330	2.662	540.2
11	4.0000	.25000	72.000	.2420-01	.1970-01	.2730-01	.3724-03	.3037-03	.4198-03	.1940	2.280	538.6
11	4.0000	.27500	73.000	.2270-01	.1850-01	.2560-01	.3495-03	.2852-03	.3940-03	.1820	2.144	537.9
11	4.0000	.30000	74.000	.1940-01	.1580-01	.2190-01	.2986-03	.2436-03	.3366-03	.1560	1.933	539.0
11	4.0000	.32500	75.000	.2040-01	.1670-01	.2300-01	.3146-03	.2557-03	.3545-03	.1640	2.161	537.0
11	4.0000	.35000	76.000	.1550-01	.1260-01	.1740-01	.2381-03	.1943-03	.2673-03	.1240	1.637	536.7
11	4.0000	.37500	77.000	.9500-02	.7700-02	.1470-01	.2006-03	.1638-03	.2261-03	.1050	1.381	536.2
11	4.0000	.40000	78.000	.6600-02	.5400-02	.1070-01	.1460-03	.1192-03	.1645-03	.7600-01	1.005	536.2
11	4.0000	.42500	79.000	.5200-02	.4300-02	.5900-02	.1014-03	.8277-04	.1142-03	.5300-01	.6980	535.8
11	4.0000	.45000	80.000	.4000-02	.3200-02	.4500-02	.6090-04	.4972-04	.6861-04	.3200-01	.4150	535.6
11	4.0000	.47500	81.000	.4000-02	.3200-02	.4500-02	.6090-04	.4972-04	.6861-04	.3200-01	.4150	535.6

DATE 07 OCT 75

OH-74 (AEDC V418-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 297

OH-74 (AEDC V418-88A) B62C12F10M16H127E52VBR19

(RV800N)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	N/HREF R=1.0	H/HREF R-TAM	H(10) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAM) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTNOT DEG. R /SEC	TN DEG. R
11	4.0000	.47500	63.000	.3500-02	.2900-02	.4000-02	.5441-04	.4443-04	.6130-04	.2900-01	.3840	535.5
11	4.0000	.50000	64.000	.2800-02	.2300-02	.3100-02	.4261-04	.3480-04	.4801-04	.2200-01	.2770	535.5
11	4.0000	.52500	65.000	.3000-02	.2400-02	.3400-02	.4588-04	.3744-04	.5168-04	.2400-01	.2980	535.7
11	4.0000	.55000	66.000	.2000-02	.1600-02	.2200-02	.3043-04	.2489-04	.3428-04	.1600-01	.1880	535.4
11	4.0000	.60000	67.000	.8000-03	.7000-03	.1000-02	.1298-04	.1060-04	.1462-04	.7000-02	.770. 1	535.3
11	4.0000	.65000	68.000	.1600-02	.1300-02	.1800-02	.2507-04	.2047-04	.2824-04	.1300-01	.1550	535.4
11	4.0000	.70000	69.000	.1500-02	.1200-02	.1600-02	.2245-04	.1833-04	.2529-04	.1200-01	.1310	536.0
11	4.0000	.75000	70.000	.1100-02	.9000-03	.1200-02	.1652-04	.1350-04	.1861-04	.9000-02	.9700-01	534.9
11	4.0000	.80000	75.000	.1400-02	.1100-02	.1600-02	.2145-04	.1751-04	.2417-04	.1100-01	.1360	535.7
11	4.0000	.85000	76.000	.1900-02	.1500-02	.2100-02	.2905-04	.2373-04	.3272-04	.1500-01	.1820	534.3
11	4.0000	.87500	77.000	.2200-02	.1800-02	.2500-02	.3446-04	.2814-04	.3882-04	.1800-01	.2380	535.3
11	4.0000	.90000	78.000	.3300-02	.2700-02	.3700-02	.5088-04	.4154-04	.5733-04	.2700-01	.3460	535.8
11	4.0000	.92500	79.000	.4100-02	.3300-02	.4600-02	.6248-04	.5102-04	.7039-04	.3300-01	.4070	535.5
11	4.0000	.95000	80.000	.1800-02	.1300-02	.1800-02	.2458-04	.2005-04	.2772-04	.0000	.0000	583.3

DATE 07 OCT 75

OH-74 (AEDC W418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 298

OH-74 (AEDC W418-B8A) B62C12F10H16H127E32V8R19

(RV8004)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = -1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	R40 SLUOS /FT3	MU LB-SEC /FT2
22	7.940	29.83	190.6	1255.	90.19	-1.100	92.20	.2100-C	.9050	3736.	.1865-04	.7425-07
RUN NUMBER	RM/L X10 6	MREF BTU/ R FT2SEC	STN NO R=									
22	.9386	.2322-01	.4176-01									

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(190) FT2SEC	H(10) BTU/ R	H(10) FT2SEC	H(10) BTU/ R	QDOT BTU/ R FT2SEC	DTNOT DEG. R /SEC	TM DEG. R
22	1.0000	.27500	1.0000	.1310-01	.1080-01	.1460-01	.3032-03	.2499-03	.3394-03	.1780	1.850	541.3	
22	1.0000	.30000	2.0000	.1110-01	.9100-02	.1240-01	.2573-03	.2121-03	.2680-03	.1510	1.610	540.8	
22	1.0000	.32500	3.0000	.9800-02	.8100-02	.1100-01	.2276-03	.1877-03	.2548-03	.1340	1.380	540.2	
22	1.0000	.35000	4.0000	.1070-01	.8800-02	.1200-01	.2483-03	.2048-03	.2779-03	.1460	1.520	540.0	
22	1.0000	.37500	5.0000	.1080-01	.8900-02	.1200-01	.2500-03	.2061-03	.2798-03	.1470	1.550	540.6	
22	1.0000	.40000	6.0000	.1810-01	.1500-01	.2030-01	.4211-03	.3471-03	.5365-03	.2480	2.549	540.8	
22	1.0000	.42500	7.0000	.2060-01	.1700-01	.2310-01	.4792-03	.3949-03	.5365-03	.2820	2.922	541.7	
22	1.0000	.45000	8.0000	.2190-01	.1810-01	.2450-01	.5088-03	.4133-03	.5696-03	.2990	3.061	541.6	
22	1.0000	.47500	9.0000	.2850-01	.2350-01	.3190-01	.6612-03	.5447-03	.7404-03	.3880	3.949	542.8	
22	1.0000	.50000	10.0000	.2670-01	.2360-01	.3210-01	.6662-03	.5488-03	.7461-03	.3910	3.958	543.1	
22	1.0000	.52500	11.0000	.2020-01	.1660-01	.2260-01	.4682-03	.3859-03	.5241-03	.2750	2.792	541.5	
22	1.0000	.55000	12.0000	.1730-01	.1430-01	.1940-01	.4018-03	.3312-03	.4497-03	.2370	2.378	540.7	
22	1.0000	.60000	13.0000	.1110-01	.9200-02	.1250-01	.2589-03	.2134-03	.2897-03	.1530	1.549	539.9	
22	1.0000	.65000	14.0000	.1070-01	.8800-02	.1200-01	.2482-03	.2047-03	.2777-03	.1460	1.487	539.3	
22	1.0000	.70000	15.0000	.7700-02	.6300-02	.8600-02	.1783-03	.1471-03	.1995-03	.1050	1.033	538.3	
22	1.0000	.75000	16.0000	.3200-02	.2700-02	.3600-02	.7460-04	.6171-04	.8368-04	.4400-01	.4490	538.0	
22	1.0000	.80000	17.0000	.1000-02	.9000-03	.1200-02	.2426-04	.2002-04	.2713-04	.1400-01	.1400	537.4	
22	1.0000	.85000	18.0000	.1370-01	.1130-01	.1530-01	.3180-03	.2621-03	.3559-03	.1870	2.197	541.1	
22	2.0000	.28500	19.0000	.1230-01	.1010-01	.1370-01	.2848-03	.2118-03	.3187-03	.1680	1.982	540.2	
22	2.0000	.33700	20.0000	.2940-01	.2420-01	.3290-01	.6826-03	.5624-03	.7643-03	.4010	4.728	542.4	
22	2.0000	.39000	21.0000	.2920-01	.2410-01	.3270-01	.6785-03	.5589-03	.7598-03	.3980	4.666	543.2	
22	2.0000	.42600	22.0000	.2160-01	.1780-01	.2420-01	.5025-03	.4141-03	.5626-03	.2950	3.294	541.8	
22	2.0000	.47800											

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 299

OH-74 (AEDC V418-B8A) B62C12F10M16M127E52V8R19

(RVB004)

RUN NUMBER	TRAJE	X/L	T/C NO	W/REF R=0.9	W/REF R=1.0	W/REF R-TAH	H1G10) BTU/ R FT2SEC	H1T0) BTU/ R FT2SEC	H1TAH) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TW DEG. R
22	2.0000	.53000	23.000	.1270-01	.1040-01	.1420-01	.2941-03	.2424-03	.3291-03	.1730	1.933	540.5
22	2.0000	.56700	24.000	.1035-01	.8500-02	.1150-01	.2362-03	.1984-03	.2366-03	.1410	1.531	539.6
22	2.0000	.62000	25.000	.7500-02	.6200-02	.8400-02	.1739-03	.1434-03	.1945-03	.1C30	1.119	538.7
22	2.0000	.67000	26.000	.4800-02	.3900-02	.5300-02	.1103-03	.9101-04	.1234-03	.6500-01	.7110	538.4
22	2.0000	.70500	27.000	.3300-02	.2700-02	.3700-02	.7715-04	.6365-04	.8630-04	.4600-01	.4930	537.6
22	2.0000	.75000	28.000	.1600-02	.1300-02	.1800-02	.3655-04	.3017-04	.4088-04	.2200-01	.2390	536.8
22	2.0000	.80000	29.000	.6000-03	.5000-03	.7000-03	.1471-04	.1214-04	.1645-04	.9000-02	.9600-01	537.1
22	2.0000	.82400	30.000	.0000	.0000	.0000	.9734-06	.8032-06	.1089-05	.1000-02	.8000-02	537.1
22	3.0000	.20000	31.000	.2810-01	.2320-01	.3150-01	.6533-03	.5377-03	.7320-03	.3810	4.041	545.9
22	3.0000	.22500	32.000	.2470-01	.2030-01	.2770-01	.5736-03	.4722-03	.6426-03	.3350	3.753	544.9
22	3.0000	.25000	33.000	.1910-01	.1570-01	.2140-01	.4432-03	.3651-03	.4962-03	.2600	2.912	542.8
22	3.0000	.27500	34.000	.1510-01	.1250-01	.1690-01	.3510-03	.2893-03	.3929-03	.2050	2.476	541.3
22	3.0000	.30000	35.000	.1290-01	.1070-01	.1450-01	.3003-03	.2476-03	.3361-03	.1770	2.194	540.3
22	3.0000	.32500	36.000	.1530-01	.1260-01	.1710-01	.3545-03	.2922-03	.3957-03	.2090	2.454	540.2
22	3.0000	.35000	37.000	.2610-01	.2150-01	.2930-01	.6070-03	.5002-03	.6795-03	.3570	4.146	541.6
22	3.0000	.37500	38.000	.3390-01	.2790-01	.3790-01	.7862-03	.6475-03	.8805-03	.4610	5.405	543.4
22	3.0000	.40000	39.000	.2160-01	.1780-01	.2420-01	.5022-03	.4139-03	.5622-03	.2950	3.487	541.3
22	3.0000	.42500	40.000	.2040-01	.1680-01	.2280-01	.4732-03	.3901-03	.5297-03	.2780	3.302	541.4
22	3.0000	.45000	41.000	.1610-01	.1330-01	.1860-01	.3733-03	.3078-03	.4118-03	.2200	2.519	540.0
22	3.0000	.47500	42.000	.1270-01	.1050-01	.1430-01	.2960-03	.2440-03	.3312-03	.1750	1.949	539.7
22	3.0000	.50000	43.000	.1110-01	.9100-02	.1240-01	.2570-03	.2119-03	.2975-03	.1520	1.693	539.4
22	3.0000	.52500	44.000	.7400-02	.6100-02	.8300-02	.1715-03	.1414-03	.1919-03	.1010	1.191	538.6
22	3.0000	.55000	45.000	.6600-02	.5400-02	.7400-02	.1526-03	.1259-03	.1708-03	.9000-01	1.008	538.3
22	3.0000	.60000	46.000	.4800-02	.4000-02	.5400-02	.1125-03	.9283-04	.1259-03	.6700-01	.7260	537.9
22	3.0000	.65000	47.000	.3600-02	.3000-02	.4000-02	.8392-04	.6924-04	.9386-04	.5000-01	.5290	537.3
22	3.0000	.70000	48.000	.1700-02	.1400-02	.1900-02	.3925-04	.3239-04	.4390-04	.2300-01	.2570	536.9
22	3.0000	.75000	49.000	.6000-03	.5000-03	.7000-03	.1370-04	.1130-04	.1532-04	.8000-02	.8900-01	536.7
22	3.0000	.80000	50.000	.3000-03	.3000-03	.4000-03	.7882-05	.6504-05	.8116-05	.5000-02	.5000-01	537.0
22	3.0000	.85000	51.000	.4000-03	.3000-03	.4000-03	.8187-05	.6754-05	.9158-05	.5000-02	.6000-01	538.0
22	3.0000	.90000	53.000	.5000 33	.4000-03	.5000-03	.1050-04	.8663-05	.1175-04	.6000-02	.8700-01	538.4
22	3.0000	.92500	54.000	.1300-02	.1100-02	.1500-02	.3030-04	.2439-04	.3390-04	.1800-01	.2350	538.5
22	3.0000	.95000	55.000	.1100-02	.9000-03	.1200-02	.2540-04	.2095-04	.2842-04	.1500-01	.1530	538.4
22	4.0000	.20000	71.000	.3330-01	.2740-01	.3740-01	.7739-03	.6363-03	.8677-03	.4490	5.120	549.0
22	4.0000	.22500	72.000	.2500-01	.2080-01	.2500-01	.4467-03	.3678-03	.5003-03	.2620	3.961	546.2
22	4.0000	.25000	73.000	.1920-01	.1580-01	.2150-01	.4772-03	.3493-03	.4749-03	.3380	3.066	544.1
22	4.0000	.27500	74.000	.1830-01	.1500-01	.2050 31	.4240-03	.3493-03	.4749-03	.2490	3.078	543.2
22	4.0000	.30000	56.000	.2020-01	.1660-01	.2260-01	.4692-03	.3865-03	.5253-03	.2750	3.612	542.5
22	4.0000	.32500	57.000	.2800-01	.2300-01	.3130-01	.6494-03	.5348-03	.7273-03	.3800	4.983	544.0
22	4.0000	.35000	58.000	.2250-01	.1850-01	.2510-01	.5213-03	.4294-03	.5837-03	.3060	4.011	542.7
22	4.0000	.37500	59.000	.1470-01	.1210-01	.1650-01	.3421-01	.2820-03	.3829-03	.2010	2.645	540.5
22	4.0000	.40000	60.000	.1070-01	.8800-02	.1200-01	.2482-03	.2046-03	.2777-03	.1460	1.921	540.0
22	4.0000	.42500	61.000	.8200-02	.6800-02	.9200-02	.1908-03	.1574-03	.2136-03	.1130	1.480	539.3
22	4.0000	.45000	62.000	.6400-02	.5300-02	.7200-02	.1488-03	.1228-03	.1665-03	.8800-01	1.142	538.8

DATE 07 OCT 75

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 300

(RV8004)

04-74 (AEDC V41B-88A) B62C12F10H18M127E52V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H(970) BTU/ R FT2SEC	H(170) BTU/ R FT2SEC	H(1AN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DT40T DEG. R /SEC	TH DEG. R
22	4.0000	.47500	63.000	.5300-02	.4400-02	.5900-02	.1231-03	.1015-03	.1377-03	.7300-01	.9280	538.8
22	4.0000	.50000	64.000	.3700-02	.3000-02	.4100-02	.8548-04	.7051-04	.9563-04	.5100-01	.6270	538.4
22	4.0000	.52500	65.000	.3400-02	.2800-02	.3800-02	.7502-04	.6519-04	.8841-04	.4700-01	.5900	538.4
22	4.0000	.55000	66.000	.2900-02	.2400-02	.3200-02	.6719-04	.5643-04	.7516-04	.4000-01	.4670	538.1
22	4.0000	.60000	67.000	.2100-02	.1700-02	.2300-02	.4839-04	.3993-04	.5413-04	.2900-01	.3230	537.6
22	4.0000	.65000	68.000	.1300-02	.1100-02	.1400-02	.2977-04	.2456-04	.3330-04	.1800-01	.2070	537.2
22	4.0000	.70000	69.000	.1300-02	.1100-02	.1500-02	.3112-04	.2567-04	.3481-04	.1800-01	.2060	537.9
22	4.0000	.75000	70.000	.5000-03	.4000-03	.5000-03	.1061-04	.8755-05	.1187-04	.6000-02	.7000-01	537.3
22	4.0000	.80000	75.000	.2000-03	.2000-03	.3000-03	.5583-05	.4606-05	.6245-05	.3000-02	.4000-01	538.0
22	4.0000	.87500	77.000	.4000-03	.4000-03	.5000-03	.1013-04	.8358-05	.1133-04	.6000-02	.7900-01	537.6
22	4.0000	.90000	78.000	.7000-03	.6000-03	.8000-03	.1690-04	.1394-04	.1890-04	.1000-01	.1300	538.0
22	4.0000	.92500	79.000	.7000-03	.6000-03	.8000-03	.1695-04	.1399-04	.1896-04	.1000-01	.1250	537.8
22	4.0000	.95000	80.000	.1700-02	.1400-02	.1900-02	.3984-04	.3281-04	.4462-04	.2300-01	.2710	538.4

ORBITER FUSELAGE
 OH-74 (AEDC V41B-B8A) B62C12F10M16H127E52V8R19
 PARAMETRIC DATA
 BETA = -1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	D PSIA	V FT/SEC	RHO SLUGS /FT3	MU LB-SEC /FT2
23	7.940	34.80	187.9	1254.	-168.7	-1.000	92.10	.2000-01	.8920	3735.	.1840-04	.7419-07
RUN NUMBER	RN/L X10 6	MREF BTU/ R FT2SEC	STN NO R- .0175									
23	.9264	.2305-01	.4204-01									

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H1(90) BTU/ R FT2SEC	H1(0) BTU/ R FT2SEC	H1(A1) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTMDT DEG. R /SEC	TM DEG. R
23	1.0000	.27500	1.0000	.1480-01	.1220-01	.1660-01	.3418-03	.2818-03	.3825-03	.2010	2.091	539.6
23	1.0000	.30000	2.0000	.1230-01	.1020-01	.1380-01	.2846-03	.2346-03	.3185-03	.1680	1.781	519.8
23	1.0000	.32500	3.0000	.1120-01	.9200-02	.1250-01	.2573-03	.2122-03	.2880-03	.1520	1.561	539.1
23	1.0000	.35000	4.0000	.1220-01	.1000-01	.1360-01	.2801-03	.2309-03	.3134-03	.1650	1.715	539.2
23	1.0000	.37500	5.0000	.1630-01	.1340-01	.1820-01	.3749-03	.3091-03	.4196-03	.2210	2.324	540.0
23	1.0000	.40000	6.0000	.2180-01	.1800-01	.2440-01	.5021-03	.4139-03	.5620-03	.2960	3.040	540.0
23	1.0000	.42500	7.0000	.1530-01	.1270-01	.1720-01	.3537-03	.2916-03	.3959-03	.2080	2.162	539.9
23	1.0000	.45000	8.0000	.2460-01	.2030-01	.2760-01	.5675-03	.4678-03	.6352-03	.3340	3.417	540.5
23	1.0000	.47500	9.0000	.1980-01	.1630-01	.2220-01	.4564-03	.3762-03	.5109-03	.2680	2.736	540.5
23	1.0000	.50000	10.0000	.1650-01	.1370-01	.1860-01	.3828-03	.3156-03	.4284-03	.2250	2.289	539.6
23	1.0000	.52500	11.0000	.1980-01	.1630-01	.2220-01	.4563-03	.3761-03	.5107-03	.2690	2.725	540.0
23	1.0000	.55000	12.0000	.1600-01	.1320-01	.1790-01	.3686-03	.3039-03	.4124-03	.2170	2.185	539.2
23	1.0000	.60000	13.0000	.1220-01	.1010-01	.1370-01	.2822-03	.2327-03	.3158-03	.1660	1.689	539.1
23	1.0000	.65000	14.0000	.9200-02	.7600-02	.1030-01	.2123-03	.1751-03	.2376-03	.1250	1.272	538.5
23	1.0000	.70000	15.0000	.3700-02	.3100-02	.4100-02	.8550-04	.7053-04	.9565-04	.5100-01	.4950	537.7
23	1.0000	.75000	16.0000	.7000-03	.6000-03	.8000-03	.1698-04	.1401-04	.1900-04	.1000-01	.1020	537.4
23	1.0000	.80000	17.0000	.7000-03	.6000-03	.8000-03	.1615-04	.1332-04	.1806-04	.1000-01	.9300-01	537.3
23	2.0000	.85000	18.0000	.1480-01	.1220-01	.1650-01	.3400-03	.2803-03	.3875-03	.2000	2.351	540.0
23	2.0000	.33700	19.0000	.1490-01	.1230-01	.1670-01	.3433-03	.2830-03	.3842-03	.2020	2.388	539.7
23	2.0000	.39000	20.0000	.2430-01	.2000-01	.2720-01	.5594-03	.4611-03	.6262-03	.3290	3.882	540.8
23	2.0000	.42600	21.0000	.2290-01	.1890-01	.2560-01	.5281-03	.4352-03	.5912-03	.3100	3.643	541.1
23	2.0000	.47800	22.0000	.1530-01	.1260-01	.1710-01	.3523-03	.2904-03	.3943-03	.2070	2.316	539.7

(RV8004)

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

OH-74 (AEDC V41B-B8A) 862C12F10M16M127E52V8R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R-TAW	H(9T) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAW) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TH DEG. R
23	2.0000	.53000	23.000	.1160-01	.9600-02	.1300-01	.2674-03	.2204-03	.2993-03	.1570	1.757	539.9
23	2.0000	.56700	24.000	.0800-02	.7200-02	.9800-02	.2025-03	.1670-03	.2265-03	.1570	1.301	538.8
23	2.0000	.62000	25.000	.6200-02	.5100-02	.6900-02	.1419-03	.1171-03	.1588-03	.8400-01	.9130	538.6
23	2.0000	.67000	26.000	.3100-02	.2600-02	.3500-02	.7242-04	.5974-04	.8102-04	.4300-01	.4660	537.9
23	2.0000	.70500	27.000	.1400-02	.1100-02	.1500-02	.3168-04	.2614-04	.3543-04	.1900-01	.2020	537.0
23	2.0000	.75000	28.000	.7000-03	.6000-03	.8000-03	.1583-04	.1308-04	.1771-04	.9000-02	1.030	536.7
23	2.0000	.80000	29.000	.9000-03	.7000-03	.1000-02	.1990-04	.1642-04	.2226-04	.1200-01	.1300	536.9
23	2.0000	.82400	30.000	.3000-03	.2000-03	.3000-03	.6940-05	.5478-05	.7487-05	.4000-02	.9800-01	837.1
23	3.0000	.80000	31.000	.2850-01	.2340-01	.3190-01	.6584-03	.5405-03	.7352-03	.3840	4.074	543.6
23	3.0000	.82500	32.000	.2410-01	.1980-01	.2700-01	.9554-03	.4575-03	.6220-03	.3250	3.844	542.9
23	2.9000	.85000	33.000	.1900-01	.1560-01	.2120-01	.4368-03	.3583-03	.4890-03	.2560	2.875	541.4
23	3.0000	.87500	34.000	.1480-01	.1220-01	.1660-01	.3416-03	.2816-03	.3823-03	.2010	2.411	540.3
23	3.0000	.30000	35.000	.1320-01	.1080-01	.1470-01	.3031-03	.2499-03	.3392-03	.1790	2.215	539.5
23	3.0000	.32500	36.000	.1980-01	.1630-01	.2220-01	.4570-03	.3767-03	.5115-03	.2690	3.160	540.1
23	3.0000	.35000	37.000	.2750-01	.2270-01	.3080-01	.6336-03	.5222-03	.7092-03	.3730	4.330	540.7
23	3.0000	.37500	38.000	.2150-01	.1770-01	.2410-01	.4956-03	.4085-03	.5947-03	.2920	3.424	540.4
23	3.0000	.40000	39.000	.1520-01	.1260-01	.1710-01	.3513-03	.2037-03	.3932-03	.2070	2.447	539.2
23	3.0000	.42500	40.000	.1580-01	.1300-01	.1770-01	.3644-03	.3004-03	.4078-03	.2150	2.548	539.7
23	3.0000	.45000	41.000	.1260-01	.1040-01	.1410-01	.2912-03	.2401-03	.3259-03	.1720	1.965	539.3
23	3.0000	.47500	42.000	.1060-01	.8700-02	.1190-01	.2441-03	.2013-03	.2731-03	.1440	1.608	538.8
23	3.0000	.50000	43.000	.9000-02	.7500-02	.1010-01	.2066-03	.1720-03	.2334-03	.1230	1.374	538.9
23	3.0000	.52500	44.000	.6400-02	.5300-02	.7200-02	.1479-03	.1220-03	.1655-03	.8700-01	1.026	538.4
23	3.0000	.55000	45.000	.5500-02	.4500-02	.6100-02	.1267-03	.1045-03	.1417-03	.7500-01	.8360	538.2
23	3.0000	.60000	46.000	.4000-02	.3300-02	.4400-02	.9119-04	.7523-04	.1020-03	.5400-01	.5880	537.6
23	3.0000	.65000	47.000	.2800-02	.2300-02	.3100-02	.6459-04	.5329-04	.7225-04	.3800-01	.4470	537.2
23	3.0000	.70000	48.000	.9000-03	.7000-03	.1000-02	.2085-04	.1721-04	.2333-04	.1200-01	.1370	536.7
23	3.0000	.75000	49.000	.9000-03	.8000-03	.1000-02	.2120-04	.1749-04	.2371-04	.1300-01	.1370	536.8
23	3.0000	.80000	50.000	.1000-02	.8000-03	.1100-02	.2191-04	.1808-04	.2451-04	.1300-01	.1390	537.2
23	3.0000	.85000	51.000	.8000-03	.7000-03	.9000-03	.1846-04	.1523-04	.2065-04	.1100-01	.1350	537.8
23	3.0000	.87500	52.000	.1200-02	.1000-02	.1400-02	.2816-04	.2323-04	.3150-04	.1700-01	.2060	538.0
23	3.0000	.90000	53.000	.8000-03	.7000-03	.9000-03	.1905-04	.1571-04	.2131-04	.1100-01	.1570	538.2
23	3.0000	.12500	54.000	.1000-02	.8000-03	.1100-02	.2335-04	.1926-04	.2613-04	.1400-01	.1810	538.4
23	3.0000	.15000	55.000	.1500-02	.1200-02	.1700-02	.3470-04	.2862-04	.3883-04	.2000-01	.2080	538.3
23	4.0000	.20000	71.000	.3190-01	.2630-01	.3580-01	.7361-03	.6057-03	.8249-03	.4290	4.893	546.1
23	4.0000	.22500	72.000	.2330-01	.1910-01	.2600-01	.5360-03	.4413-03	.6004-03	.3130	3.673	544.1
23	4.0000	.25000	73.000	.1900-01	.1570-01	.2130-01	.4382-03	.3609-03	.4907-03	.2570	3.012	542.8
23	4.0000	.27500	74.000	.1990-01	.1640-01	.2230-01	.4583-03	.3775-03	.5131-03	.2690	3.328	542.3
23	4.0000	.30000	56.000	.2270-01	.1870-01	.2550-01	.5243-03	.4320-03	.5870-03	.4037	4.037	541.7
23	4.0000	.32500	57.000	.2200-01	.1810-01	.2460-01	.5072-03	.4179-03	.5679-03	.2980	3.908	541.5
23	4.0000	.35000	58.000	.1470-01	.1210-01	.1650-01	.3391-03	.2795-03	.3795-03	.2300	2.620	540.2
23	4.0000	.37500	59.000	.1230-01	.1020-01	.1380-01	.2842-03	.2343-03	.3180-03	.1670	2.199	539.4
23	4.0000	.40000	60.000	.9000-02	.7400-02	.1010-01	.2082-03	.1716-03	.2329-03	.1230	1.612	539.1
23	4.0000	.42500	61.000	.6500-02	.5400-02	.7300-02	.1499-03	.1236-03	.1677-03	.8800-01	1.162	538.6

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 303

(RV8004)

OH-74 (AEDC V41B-B8A) B62C12F10M16M127E52V8R19

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H19T0 BTU/ R FT2SEC	H1T0 DTU/ R FT2SEC	H1TAM BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
23	4.0000	.45000	62.000	.4900-02	.4000-02	.5500-02	.1125-03	.9275-04	.1258-03	.6600-01	.8620	538.7
23	4.0000	.47500	63.000	.4000-02	.3300-02	.4500-02	.9327-04	.7693-04	.1043-03	.5500-01	.7030	538.2
23	4.0000	.50000	64.000	.3200-02	.2700-02	.3600-02	.7433-04	.6131-04	.8316-04	.4400-01	.5450	538.1
23	4.0000	.52500	65.000	.2900-02	.2400-02	.3200-02	.6642-04	.5479-04	.7131-04	.3900-01	.4870	538.0
23	4.0000	.55000	66.000	.2400-02	.2000-02	.2700-02	.5609-04	.4626-04	.6275-04	.3300-01	.3900	538.0
23	4.0000	.60000	67.000	.1500-02	.1200-02	.1700-02	.3463-04	.2857-04	.3873-04	.2000-01	.2310	537.3
23	4.0000	.65000	68.000	.6000-03	.5000-03	.6000-03	.1326-04	.1094-04	.1483-04	.8000-02	.9200-01	53.1
23	4.0000	.70000	69.000	.1400-02	.1200-02	.1600-02	.3320-04	.2739-04	.3714-04	.2000-01	.2190	537.9
23	4.0000	.75000	70.000	.9000-03	.7000-03	.1000-02	.1963-04	.1619-04	.2196-04	.1200-01	.1300	537.6
23	4.0000	.80000	75.000	.5000-03	.4000-03	.6000-03	.1246-04	.1027-04	.1394-04	.7000-02	.8900-01	538.1
23	4.0000	.87500	77.000	.8000-03	.6000-03	.9000-03	.1754-04	.1447-04	.1962-04	.1000-01	.1360	537.7
23	4.0000	.90000	78.000	.1600-02	.1300-02	.1800-02	.3662-04	.3020-04	.4097-04	.2200-01	.2810	538.1
23	4.0000	.92500	79.000	.2000-02	.1600-02	.2200-02	.4530-04	.3737-04	.5069-04	.2700-01	.3320	538.2
23	4.0000	.95000	80.000	.1700-02	.1400-02	.1900-02	.3984-04	.3281-04	.4462-04	.2300-01	.2710	538.4

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 304

OH-74 (AEDC V41B-88A) B62C12F10M16H127E52V8R19

(RVB004)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = -1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
24	7.940	39.86	190.9	1253.	-174.2	-1.000	92.10	.2100-01	.9060	3733.	.1871-04	.7413-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175
24	.9423	.2323-01	.4169-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAM	H(TO) BTU/ R FT ² SEC	H(TO) BTU/ R FT ² SEC	H(TAM) BTU/ R FT ² SEC	QDOT BTU/ R FT ² SEC	DTWOT DEG. R /SEC	TH DEG. R
24	1.0000	.27500	1.0000	.1330-01	.1100-01	.1490-01	.3092-03	.2548-03	.3461-03	.1820	1.886	540.2
24	1.0000	.30000	2.0000	.1170-01	.9600-02	.1310-01	.2716-03	.2239-03	.3040-03	.1620	1.697	540.0
24	1.0000	.32500	3.0000	.1110-01	.9200-02	.1250-01	.2585-03	.2131-03	.2893-03	.1520	1.565	539.4
24	1.0000	.35000	4.0000	.1780-01	.1470-01	.1990-01	.4134-03	.3408-03	.4626-03	.2430	2.525	539.5
24	1.0000	.37500	5.0000	.1820-01	.1500-01	.2040-01	.4225-03	.3483-03	.4731-03	.2480	2.613	540.4
24	1.0000	.40000	6.0000	.1690-01	.1390-01	.1890-01	.3926-03	.3236-03	.4394-03	.2310	2.375	539.8
24	1.0000	.42500	7.0000	.1950-01	.1610-01	.2180-01	.4526-03	.3730-03	.5066-03	.2660	2.758	540.6
24	1.0000	.45000	8.0000	.2220-01	.1830-01	.2480-01	.5146-03	.4241-03	.5760-03	.3020	3.093	540.5
24	1.0000	.47500	9.0000	.1630-01	.1350-01	.1830-01	.3797-03	.3130-03	.4250-03	.2230	2.274	540.0
24	1.0000	.50000	10.000	.2030-01	.1670-01	.2270-01	.4706-03	.3879-03	.5268-03	.2760	2.805	540.2
24	1.0000	.52500	11.000	.1850-01	.1530-01	.2070-01	.4298-03	.3543-03	.4811-03	.2530	2.563	539.9
24	1.0000	.55000	12.000	.1410-01	.1170-01	.1580-01	.3283-03	.2706-03	.3675-03	.1930	1.942	539.7
24	1.0000	.60000	13.000	.1060-01	.8700-02	.1180-01	.2459-03	.2028-03	.2753-03	.1450	1.469	539.3
24	1.0000	.65000	14.000	.5100-02	.4200-02	.5700-02	.1179-03	.9720-04	.1319-03	.6900-01	.7050	538.5
24	1.0000	.70000	15.000	.1100-02	.9000-03	.1200-02	.2490-04	.2054-04	.2786-04	.1500-01	.1440	537.3
24	1.0000	.75000	16.000	.2100-02	.1700-02	.2300-02	.4813-04	.3970-04	.5384-04	.2800-01	.2890	537.4
24	1.0000	.80000	17.000	.1300-02	.1000-02	.1400-02	.2922-04	.2411-04	.3269-04	.1700-01	.1680	537.4
24	1.0000	.85000	18.000	.1430-01	.1180-01	.1600-01	.3315-03	.2732-03	.3700-03	.1950	2.289	540.0
24	2.0000	.28500	19.000	.1970-01	.1620-01	.2200-01	.4574-03	.3769-03	.5120-03	.2690	3.171	540.5
24	2.0000	.33700	20.000	.1870-01	.1540-01	.2090-01	.4338-03	.3576-03	.4856-03	.2550	3.010	540.2
24	2.0000	.39000	21.000	.2260-01	.1860-01	.2530-01	.5254-03	.4329-03	.5882-03	.340	3.620	540.9
24	2.0000	.42600	22.000	.1610-01	.1330-01	.1800-01	.3742-03	.3084-03	.4188-03	.2200	2.455	539.9

(RV8004)

04-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

04-74 (AEDC V41B-B8A) B62C12F10M16W127E52/BR19

DATE 07 OCT 75

RUN NUMBER	TRA'E	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TM DEG. R
24	4.0000	.45000	62.000	.4400-02	.3600-02	.4900-02	.1024-03	.8444-04	.46-03	.6000-01	.7840	538.4
24	4.0000	.47500	63.000	.3300-02	.2700-02	.3700-02	.7584-04	.6235-04	.8486-04	.4500-01	.5710	538.2
24	4.0000	.50000	64.000	.2600-02	.2200-02	.2900-02	.6083-04	.5017-04	.6806-04	.3600-01	.4460	537.8
24	4.0000	.52500	65.000	.2700-02	.2200-02	.3000-02	.6237-04	.5144-04	.6978-04	.3700-01	.4570	537.9
24	4.0000	.55000	66.000	.2400-02	.2000-02	.2600-02	.5500-04	.4537-04	.6153-04	.3200-01	.3820	537.6
24	4.0000	.60000	67.000	.1000-02	.9000-03	.1200-02	.2404-04	.1983-04	.2690-04	.1400-01	.1600	537.3
24	4.0000	.65000	68.000	.2000-03	.2000-03	.2000-03	.4947-05	.4081-05	.5535-05	.3000-02	.3400-01	537.6
24	4.0000	.70000	69.000	.2000-02	.1700-02	.2300-02	.4672-04	.3853-04	.5227-04	.2800-01	.3080	538.0
24	4.0000	.75000	70.000	.1600-02	.1300-02	.1800-02	.3753-04	.3096-04	.4198-04	.2200-01	.2480	537.3
24	4.0000	.80000	75.000	.7000-03	.6000-03	.8000-03	.1688-04	.1392-04	.1843-04	.1000-01	.1200	538.2
24	4.0000	.85000	76.000	.8000-03	.7000-03	.9000-03	.1902-04	.1568-04	.2128-04	.1100-01	.1330	538.4
24	4.0000	.87500	77.000	.1500-02	.1200-02	.1700-02	.3447-04	.2842-04	.3856-04	.2000-01	.2670	538.2
24	4.0000	.90000	78.000	.2700-02	.2200-02	.3000-02	.6304-04	.5198-04	.7055-04	.3700-01	.4820	538.8
24	4.0000	.92500	79.000	.3700-02	.3000-02	.4100-02	.8535-04	.7037-04	.9553-04	.5000-01	.6230	539.4
24	4.0000	.95000	80.000	.2800-02	.2300-02	.3200-02	.6583-04	.5428-04	.7366-04	.3300-01	.4560	538.9

DATE 07 OCT 75

OH-7H (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 307

OH-7H (AEDC V41B-B8A) 862C12F10H16M127E52V8R19

(RV8004)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = -1.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUG /FT ³	MU LB-SEC /FT ²
25	7.840	43.98	189.9	1251.	-175.7	-1.100	91.90	.2000-01	.9010	3730.	.1854-04	.7401-07

RUN NUMBER	RN/L	HREF BTU/ R FT2SEC	STN NO R= .0175 .4176-01
25	9396	.2316-01	

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(10) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QDOT BTU/ R FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
25	1.0000	.27500	1.0000	.1330-01	.1100-01	.1490-01	.3079-03	.2537-03	.3447-03	.1600	1.872	540.2
25	1.0000	.30000	2.0000	.1160-01	.9600-02	.1300-01	.2690-03	.2217-03	.3012-03	.1580	1.675	539.9
25	1.0000	.32500	3.0000	.1290-01	.1060-01	.1440-01	.2986-03	.2461-03	.3343-03	.1750	1.801	539.9
25	1.0000	.35000	4.0000	.1940-01	.1600-01	.2170-01	.4484-03	.3695-03	.5019-03	.2630	2.730	539.7
25	1.0000	.37500	5.0000	.1720-01	.1410-01	.1320-01	.3974-03	.3274-03	.4449-03	.2330	2.450	540.3
25	1.0000	.40000	6.0000	.1750-01	.1450-01	.1960-01	.4064-03	.3349-03	.4550-03	.2380	2.451	539.7
25	1.0000	.42500	7.0000	.2190-01	.1810-01	.2460-01	.5079-03	.4185-03	.5687-03	.2970	3.085	540.7
25	1.0000	.45000	8.0000	.1860-01	.1530-01	.2080-01	.4303-03	.3546-03	.4817-03	.2520	2.582	539.9
25	1.0000	.47500	9.0000	.1930-01	.1590-01	.2160-01	.4462-03	.3677-03	.4995-03	.2610	2.664	540.2
25	1.0000	.50000	10.000	.1920-01	.1580-01	.2150-01	.4444-03	.3662-03	.4975-03	.2600	2.643	539.9
25	1.0000	.52500	11.000	.1650-01	.1360-01	.1850-01	.3833-03	.3159-03	.4270-03	.2250	2.281	539.5
25	1.0000	.55000	12.000	.1310-01	.1080-01	.1470-01	.3043-03	.2509-03	.3406-03	.1780	1.796	539.3
25	1.0000	.60000	13.000	.7400-02	.6100-02	.8700-02	.1710-03	.1409-03	.1913-03	.1000+00	1.019	538.6
25	1.0000	.65000	14.000	.1700-02	.1400-02	.1900-02	.3866-04	.3188-04	.4326-04	.2300-01	.2310	537.7
25	1.0000	.70000	15.000	.2200-02	.1800-02	.2400-02	.4047-04	.4162-04	.5648-04	.3000-01	.2910	537.6
25	1.0000	.75000	16.000	.2900-02	.2400-02	.3200-02	.5606-04	.5449-04	.7394-04	.3900-01	.3950	537.7
25	1.0000	.80000	17.000	.1500-02	.1300-02	.1700-02	.3582-04	.2954-04	.4008-04	.2100-01	.2050	537.5
25	1.0000	.85000	18.000	.1420-01	.1170-01	.1390-01	.3285-03	.2707-03	.3677-03	.1920	2.262	539.9
25	1.0000	.88000	19.000	.2290-01	.1890-01	.2560-01	.4369-03	.3693-03	.5938-03	.3100	3.653	540.8
25	1.0000	.93000	20.000	.2130-01	.1700-01	.2390-01	.4074-03	.3536-03	.5536-03	.2900	3.419	540.4
25	1.0000	.98000	21.000	.2050-01	.1650-01	.2300-01	.3916-03	.3261-03	.5321-03	.2780	3.269	540.4
25	1.0000	.97800	22.000	.1530-01	.1260-01	.1710-01	.3546-03	.2922-03	.3969-03	.2080	2.322	539.4

DATE 07 OCT 75

04-74 (AEDC V418-BBA) HEATING DATA ON ORBITER FUSEL (OE PORT SIDE

PAGE 303

04-74 (AEDC V418-BBA) HEATING DATA ON ORBITER FUSEL (OE PORT SIDE

(HW8004)

RUN NUMBER	TRA/E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TU) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(11A) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWDT DEG. R /SEC	TH DEG. R
25	2.0000	.53000	23.000	.1000-01	.8200-02	.1120-01	.2314-03	.1908-03	.2590-03	.1360	1.517	539.1
25	2.0000	.56700	24.000	.6200-02	.5100-02	.6900-02	.1428-03	.1177-03	.1598-03	.6400-01	.9140	538.6
25	2.0000	.62300	25.000	.2700-02	.2200-02	.3000-02	.1673-04	.5090-04	.6908-04	.3600-01	.3960	537.9
25	2.0000	.67000	26.000	.2900-02	.2400-02	.3200-02	.6574-04	.5504-04	.7467-04	.3900-01	.4290	537.1
25	2.0000	.70500	27.000	.3200-02	.2700-02	.3600-02	.7437-04	.6133-04	.8321-04	.4400-01	.4730	537.2
25	2.0000	.75000	28.000	.2500-02	.2000-02	.2700-02	.5711-04	.4785-04	.6490-04	.3400-01	.3760	536.7
25	2.0000	.80000	29.000	.1800-02	.1500-02	.1000-02	.4271-04	.3523-04	.4779-04	.2500-01	.2780	537.0
25	2.0000	.82400	30.000	.7000-03	.5000-03	.8000-03	.1684-04	.1389-04	.1884-04	.1000-01	.1390	537.1
25	2.0000	.82000	31.000	.2800-01	.2000-01	.3140-01	.6494-03	.5345-03	.7276-03	.3780	4.011	543.8
25	2.0000	.82500	32.000	.3320-01	.2600-01	.2600-01	.5385-03	.4434-03	.6032-03	.3140	3.517	542.8
25	2.0000	.85000	33.000	.1850-01	.1530-01	.2080-01	.4302-03	.3544-03	.4817-03	.2520	2.820	541.2
25	2.0000	.87500	34.000	.1520-01	.1250-01	.1700-01	.3512-03	.2894-03	.3932-03	.2060	2.469	540.1
25	2.0000	.90000	35.000	.7500-01	.1450-01	.0000-01	.4073-03	.3356-03	.4560-03	.2390	2.960	540.0
25	2.0000	.92500	36.000	.2460-01	.2020-01	.2750-01	.5683-03	.4686-03	.6368-03	.3330	3.910	540.6
25	2.0000	.95000	37.000	.2060-01	.1690-01	.2300-01	.4761-03	.3917-03	.5330-03	.2790	3.242	540.2
25	2.0000	.97500	38.000	.2060-01	.1700-01	.2300-01	.4768-03	.3917-03	.5338-03	.2790	3.281	540.2
25	2.0000	.99000	39.000	.1530-01	.1260-01	.1710-01	.3548-03	.2957-03	.3971-03	.2080	2.461	538.9
25	2.0000	.99500	40.000	.1310-01	.1080-01	.1470-01	.3033-03	.2500-03	.3395-03	.1780	2.115	539.0
25	2.0000	.99500	41.000	.1090-01	.9000-02	.1220-01	.2522-03	.2079-03	.2823-03	.1480	1.697	538.7
25	2.0000	.99500	42.000	.8700-02	.7200-02	.9800-02	.2027-03	.1671-03	.2269-03	.1190	1.330	538.6
25	2.0000	.99500	43.000	.6800-02	.5600-02	.7600-02	.1574-03	.1238-03	.1703	.9200-01	1.033	538.2
25	2.0000	.99500	44.000	.4500-02	.3700-02	.5000-02	.1039-03	.8505-04	.1000-01	.6100-01	.7190	537.8
25	2.0000	.99500	45.000	.3990-02	.3200-02	.4400-02	.9092-04	.7498-04	.1000-01	.5300-01	.5980	537.6
25	2.0000	.99500	46.000	.2000-02	.1600-02	.1200-02	.4578-04	.3776-04	.3122-04	.2700-01	.2940	537.1
25	2.0000	.99500	47.000	.1100-02	.9000-03	.1200-02	.2565-04	.2116-04	.2870-04	.1500-01	.1610	536.7
25	2.0000	.99500	48.000	.2300-02	.1900-02	.2600-02	.5395-04	.4450-04	.6036-04	.3200-01	.3520	536.8
25	2.0000	.99500	49.000	.1500-02	.1300-02	.1700-02	.3561-04	.2937-04	.3983-04	.2100-01	.2290	536.7
25	2.0000	.99500	50.000	.1700-02	.1400-02	.1900-02	.3865-04	.3188-04	.4324-04	.2300-01	.2450	536.8
25	2.0000	.99500	51.000	.3000-02	.2500-02	.3400-02	.6971-04	.5748-04	.7801-04	.4100-01	.5090	538.1
25	2.0000	.99500	52.000	.1700-02	.1400-02	.1900-02	.3865-04	.3188-04	.4324-04	.2300-01	.2450	536.8
25	2.0000	.99500	53.000	.1500-02	.1200-02	.1700-02	.3453-04	.2847-04	.3864-04	.2000-01	.2830	538.2
25	2.0000	.99500	54.000	.2200-02	.1800-02	.2500-02	.5112-04	.4214-04	.5721-04	.3000-01	.3940	538.7
25	2.0000	.99500	55.000	.1600-02	.1300-02	.1800-02	.3734-04	.3078-04	.4179-04	.2200-01	.2230	538.5
25	2.0000	.99500	56.000	.3010-01	.2480-01	.3380-01	.6978-03	.5739-03	.7821-03	.4050	4.618	546.1
25	2.0000	.99500	57.000	.2400-01	.1970-01	.2690-01	.5553-03	.4570-03	.6222-03	.3230	3.788	544.1
25	2.0000	.99500	58.000	.2260-01	.1860-01	.2540-01	.5246-03	.4319-03	.5877-03	.3060	3.585	543.3
25	2.0000	.99500	59.000	.2200-01	.1810-01	.2460-01	.5093-03	.4194-03	.5705-03	.2970	3.681	542.5
25	2.0000	.99500	60.000	.2410-01	.1950-01	.2700-01	.5589-03	.4603-03	.6299-03	.270	4.286	541.5
25	2.0000	.99500	61.000	.1720-01	.1420-01	.1930-01	.3987-03	.3281-03	.4459-03	.2330	3.059	540.8
25	2.0000	.99500	62.000	.1440-01	.1180-01	.1610-01	.3325-03	.2740-03	.3723-03	.1950	2.559	540.0
25	2.0000	.99500	63.000	.1080-01	.8900-02	.1210-01	.2508-03	.2067-03	.2809-03	.1470	1.932	539.4
25	2.0000	.99500	64.000	.6400-02	.5300-02	.7200-02	.1491-03	.1229-03	.1659-03	.8800-01	1.151	538.5
25	2.0000	.99500	65.000	.5200-02	.4300-02	.5800-02	.1205-03	.9936-04	.1349-03	.7100-01	.9200	538.4

REPRODUCIBILITY OF THE
ORIGINAL

DATE 07 OCT 75

OH-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 310

OH-74 (AEDC V418-B8A) 862C12F10H16H127E52VBR19

(RVB005)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = -2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RNO SLUGS /FT ³	MU LB-SEC /FT ²
12	7.880	19.99	82.10	1177.	186.7	-2.300	87.70	.9000-02	.4050	3616.	.8908-05	.7062-07
RUN NUMBER	RN/L X10.6	HREF BTU/ R FT ² SEC	STN NO R=									
12	.4562	.1536-01	.6002-01									

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(9TO) BTU/ R FT ² SEC	H(1TO) BTU/ R FT ² SEC	H(1TAH) BTU/ R FT ² SEC	QOOT BTU/ R FT ² SEC	DTHOT DEG. R /SEC	TH DEG. R
12	1.0000	.27500	1.0000	.9300-02	.7600-02	.1050-01	.1429-03	.1161-03	.1611-03	.7400-01	.7720	538.9
12	1.0000	.30000	2.0000	.8400-02	.6900-02	.9500-02	.1294-03	.1055-03	.1458-03	.5700-01	.7160	538.6
12	1.0000	.32500	3.0000	.6200-02	.5100-02	.7000-02	.9529-04	.7774-04	.1074-03	.5000-01	.5120	538.0
12	1.0000	.35000	4.0000	.7100-02	.5800-02	.8000-02	.1089-03	.8888-04	.1228-03	.5700-01	.5913	537.8
12	1.0000	.37500	5.0000	.6800-02	.5500-02	.7600-02	.1038-03	.8468-04	.1170-03	.5400-01	.5700	538.2
12	1.0000	.40000	6.0000	.7600-02	.6200-02	.8600-02	.1170-03	.9544-04	.1319-03	.6100-01	.6280	538.0
12	1.0000	.42500	7.0000	.8500-02	.7000-02	.9600-02	.1312-03	.1071-03	.1479-03	.6800-01	.7110	538.0
12	1.0000	.45000	8.0000	.1190-01	.9700-02	.1340-01	.1827-03	.1491-03	.2060-03	.9500-01	.9760	538.3
12	1.0000	.47500	9.0000	.1280-01	.1040-01	.1440-01	.1965-03	.1603-03	.2215-03	.1020	1.045	538.1
12	1.0000	.50000	10.0000	.1460-01	.1190-01	.1650-01	.2243-03	.1830-03	.2528-03	.1170	1.188	538.4
12	1.0000	.52500	11.0000	.1990-01	.1620-01	.2240-01	.3051-03	.2488-03	.3439-03	.1590	1.614	538.4
12	1.0000	.55000	12.0000	.2490-01	.2030-01	.2810-01	.3825-03	.3120-03	.4312-03	.1990	2.005	538.5
12	1.0000	.60000	13.0000	.2450-01	.2000-01	.2770-01	.3768-03	.3074-03	.4248-03	.1960	1.994	538.3
12	1.0000	.65000	14.0000	.1860-01	.1520-01	.2090-01	.2854-03	.2328-03	.3217-03	.1490	1.510	538.3
12	1.0000	.70000	15.0000	.9100-02	.7400-02	.1030-01	.1402-03	.1144-03	.1580-03	.7300-01	.7170	537.8
12	1.0000	.75000	16.0000	.5700-02	.4600-02	.6400-02	.8690-04	.7091-04	.9795-04	.4500-01	.4610	537.6
12	1.0000	.80000	17.0000	.3700-02	.3000-02	.4200-02	.5671-04	.4628-04	.6391-04	.3000-01	.2880	537.3
12	2.0000	.85000	18.0000	.1070-01	.8700-02	.1210-01	.1847-03	.1343-03	.1857-03	.8600-01	1.008	538.8
12	2.0000	.33700	19.0000	.9900-02	.8100-02	.1110-01	.1516-03	.1237-03	.1709-03	.7900-01	.9330	538.4
12	2.0000	.39000	20.0000	.1140-01	.9300-02	.1280-01	.1744-03	.1422-03	.1965-03	.9100-01	1.075	537.9
12	2.0000	.42600	21.0000	.1940-01	.1580-01	.2190-01	.2981-03	.2431-03	.3361-03	.1550	1.824	538.8
12	2.0000	.47800	22.0000	.2720-01	.2220-01	.3060-01	.4171-03	.3402-03	.4703-03	.2170	2.426	538.6

DATE 07 OCT 75

OH-74 (AEDC W418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 311

OH-74 (AEDC W418-B8A) B62C12F10H16H12T52V8R19

(RV8005)

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=1.0	H(9TO) FT2SEC	H(1TO) BTU/ R FT2SEC	H(17AN) BTU/ R FT2SEC	QOOT BTU/ R FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
12	2.0000	.53000	23.000	.2950-01	.2410-01	.3330-01	.4530-03	.3694-03	.5108-03	.2360	2.631	539.1
12	2.0000	.56700	24.000	.1960-01	.1620-01	.2240-01	.3046-03	.2485-03	.3434-03	.1590	1.729	538.5
12	2.0000	.62000	25.000	.1170-01	.9500-02	.1320-01	.1792-03	.1462-03	.2020-03	.9300-01	1.018	538.2
12	2.0000	.67000	26.000	.4800-02	.3900-02	.5400-02	.7339-04	.5989-04	.8272-04	.3800-01	.4180	537.4
12	2.0000	.70500	27.000	.4100-02	.3400-02	.4700-02	.6350-04	.5182-04	.7156-04	.3300-01	.3580	536.8
12	2.0000	.75000	28.000	.4600-02	.3900-02	.5400-02	.7314-04	.5970-04	.8242-04	.3800-01	.4210	536.6
12	2.0000	.80000	29.000	.3600-02	.2900-02	.4000-02	.5456-04	.4454-04	.6149-04	.2900-01	.3160	536.5
12	2.0000	.82400	30.000	.7000-03	.6000-03	.8000-03	.1133-04	.9248-05	.1277-04	.6000-02	.8300-01	536.5
12	2.0000	.82400	31.000	.2350-01	.1910-01	.2650-01	.3605-03	.2938-03	.4066-03	.1870	1.987	540.6
12	2.0000	.82500	32.000	.1890-01	.1540-01	.2140-01	.2909-03	.2372-03	.3281-03	.1510	1.695	540.0
12	2.0000	.82500	33.000	.1500-01	.1220-01	.1690-01	.2303-03	.1878-03	.2597-03	.1200	1.345	539.1
12	2.0000	.82500	34.000	.1170-01	.9500-02	.1320-01	.1795-03	.1464-03	.2024-03	.9300-01	1.123	538.5
12	2.0000	.82500	35.000	.1030-01	.8400-02	.1160-01	.1583-03	.1291-03	.1785-03	.8200-01	1.023	538.5
12	2.0000	.82500	36.000	.1080-01	.8800-02	.1220-01	.1683-03	.1357-03	.1874-03	.8700-01	1.022	537.0
12	2.0000	.82500	37.000	.1140-01	.9300-02	.1290-01	.1757-03	.1434-03	.1981-03	.9200-01	1.066	538.0
12	2.0000	.82500	38.000	.1480-01	.1210-01	.1670-01	.2273-03	.1854-03	.2562-03	.1180	1.393	538.1
12	2.0000	.82500	39.000	.2090-01	.1710-01	.2360-01	.3213-03	.2623-03	.3632-03	.1670	1.979	538.3
12	2.0000	.82500	40.000	.2420-01	.2300-01	.3180-01	.4335-03	.3535-03	.4887-03	.2260	2.681	538.7
12	2.0000	.82500	41.000	.2840-01	.2310-01	.3200-01	.4357-03	.3553-03	.4911-03	.2270	2.600	538.5
12	2.0000	.82500	42.000	.2690-01	.2190-01	.3030-01	.4131-03	.3369-03	.4657-03	.2150	2.403	538.5
12	2.0000	.82500	43.000	.2190-01	.1780-01	.2460-01	.3357-03	.2738-03	.3785-03	.1750	1.952	538.7
12	2.0000	.82500	44.000	.1420-01	.1160-01	.1600-01	.2182-03	.1780-03	.2459-03	.1140	1.339	537.6
12	2.0000	.82500	45.000	.1140-01	.9300-02	.1280-01	.1743-03	.1423-03	.1955-03	.3100-01	1.017	537.5
12	2.0000	.82500	46.000	.7700-02	.6300-02	.8700-02	.1188-03	.9693-04	.1339-03	.6200-01	.6760	537.2
12	2.0000	.82500	47.000	.5100-02	.4200-02	.5800-02	.7847-04	.6404-04	.8844-04	.4100-01	.4360	536.9
12	2.0000	.82500	48.000	.4200-02	.3400-02	.4700-02	.6399-04	.5223-04	.7211-04	.3300-01	.3700	536.7
12	2.0000	.82500	49.000	.3600-02	.2900-02	.4100-02	.5541-04	.4323-04	.6244-04	.2900-01	.3160	536.5
12	2.0000	.82500	50.000	.3200-02	.2600-02	.3600-02	.4953-04	.4043-04	.5582-04	.2600-01	.2780	536.7
12	2.0000	.82500	51.000	.3000-03	.3000-03	.4000-03	.4885-05	.3986-05	.5506-05	.3000-02	.3200-01	537.4
12	2.0000	.82500	52.000	.1400-02	.1100-02	.1600-02	.2128-04	.1737-04	.2399-04	.1100-01	.1380	537.5
12	2.0000	.82500	53.000	.1700-02	.1400-02	.1900-02	.2614-04	.2133-04	.2947-04	.1400-01	.1900	537.8
12	2.0000	.82500	54.000	.1600-02	.1300-02	.1800-02	.2510-04	.2048-04	.2629-04	.1300-01	.1720	537.9
12	2.0000	.82500	55.000	.1200-02	.1000-02	.1400-02	.1807-04	.1548-04	.2139-04	.1000-01	.1010	537.5
12	2.0000	.82500	56.000	.2300-01	.2280-01	.3160-01	.4298-03	.3500-03	.4850-03	.2220	2.539	542.6
12	2.0000	.82500	57.000	.2260-01	.1840-01	.2550-01	.3466-03	.2825-03	.3910-03	.1800	2.110	540.8
12	2.0000	.82500	58.000	.1680-01	.1370-01	.1900-01	.2584-03	.2106-03	.2914-03	.1340	1.576	540.1
12	2.0000	.82500	59.000	.1490-01	.1200-01	.1680-01	.2291-03	.1868-03	.2583-03	.1190	1.477	539.5
12	2.0000	.82500	60.000	.1370-01	.1120-01	.1550-01	.2108-03	.1719-03	.2377-03	.1100	1.441	539.0
12	2.0000	.82500	61.000	.1740-01	.1420-01	.1960-01	.2673-03	.2180-03	.3014-03	.1390	1.828	538.8
12	2.0000	.82500	62.000	.2490-01	.2030-01	.2800-01	.3820-03	.3115-03	.4307-03	.1990	2.612	538.9
12	2.0000	.82500	63.000	.2560-01	.2090-01	.2890-01	.3935-03	.3209-03	.4437-03	.2050	2.691	538.8
12	2.0000	.82500	64.000	.2010-01	.1640-01	.2270-01	.3031-03	.2521-03	.3485-03	.1610	2.116	538.4
12	2.0000	.82500	65.000	.1600-01	.1300-01	.1800-01	.2457-03	.2004-03	.2770-03	.1280	1.683	538.2

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

PAGE 312

(RV8005)

DATE 07 OCT 75

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

RUN NUMBER	TRAPE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H1(TO) BTU/ R FT2SEC	H1(TO) BTU/ R FT2SEC	H1(TA) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTAOT DEG. R /SEC	TH DEG. R
12	4.0000	.45000	62.000	.1090-01	.8900-02	.1230-01	.1874-03	.1866-03	.1887-03	.8700-01	1.134	537.9
12	4.0000	.47500	63.000	.8600-02	.7000-02	.9700-02	.1318-03	.1075-03	.1485-03	.8900-01	.8770	538.0
12	4.0000	.50000	64.000	.6500-02	.5300-02	.7400-02	.1006-03	.8205-04	.1133-03	.5200-01	.6510	537.6
12	4.0000	.52500	65.000	.5000-02	.4100-02	.5600-02	.7688-04	.6273-04	.8666-04	.4000-01	.4980	537.6
12	4.0000	.55000	66.000	.4200-02	.3500-02	.4800-02	.6520-04	.5320-04	.7348-04	.3400-01	.4000	537.4
12	4.0000	.60900	67.000	.3100-02	.2500-02	.3500-02	.4783-04	.3904-04	.5391-04	.2400-01	.2820	538.9
12	4.0000	.65000	68.000	.2000-02	.1700-02	.2300-02	.3124-04	.2550-04	.3621-04	.500-01	.1920	537.0
12	4.0000	.75000	70.000	.1100-02	.9000-03	.1300-02	.1737-04	.1418-04	.1957-04	.9000-02	.1020	536.7
12	4.0000	.80000	75.000	.1600-02	.1300-02	.1800-02	.2398-04	.1957-04	.2702-04	.1300-01	.1510	537.1
12	4.0000	.85000	76.000	.2300-02	.1900-02	.2600-02	.3603-04	.2942-04	.4058-04	.1900-01	.2250	535.0
12	4.0000	.87500	77.000	.3000-03	.3000-03	.4000-03	.5370-05	.4383-05	.6051-05	.3000-02	.3700-01	536.5
12	4.0000	.90000	78.000	.4000-03	.3000-03	.5000-03	.6405-05	.5227-05	.7217-05	.3000-02	.4400-01	536.8
12	4.0000	.92500	79.000	.6000-03	.5000-03	.6000-03	.8755-05	.7146-05	.9865-05	.5000-02	.5700-01	536.5
12	4.0000	.95000	80.000	.1600-02	.1300-02	.1800-02	.2458-04	.2005-04	.2772-04	.0000	.0000	583.3

24-74 (AFDC 1418-B9A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

204-74 (AEOC V418-B8A) B62C12F10M16W127E52V8R19

ORBITER FUSE, AGE

PARAMETRIC DATA

BETA	-2.000	MACH	8.000	ELEVON	.0000	RUDDER	.0000
------	--------	------	-------	--------	-------	--------	-------

•••SNOI110NO~ (S3J1•••

RUN NUMBER	HACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	R40 SLUGS /FT3	NU LB-SEC /FT2
1	2.22	20.65	93.20	1177	158.3	-1.900	87.70	.9000-.02	.4040	3516.	.8680-.05	.7062-.07

...TEST DATA...

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H(G10) BTU/ R FT2SEC	H(TOI) BTU/ R FT2SEC	H(TAN) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TM DEG. R
13	1.0000	.27500	1.0000	.1020-01	.8400-02	.1160-01	.1571-03	.1281-03	.1772-03	.8200-01	.8500	538.7
13	1.0000	.30000	2.0000	.9100-02	.7400-02	.1030-01	.1396-03	.1139-03	.1574-03	.7300-01	.7740	538.4
13	1.0000	.32500	3.0000	.6300-02	.5400-02	.7500-02	.1014-03	.8271-04	.1143-03	.5300-01	.5440	537.9
13	1.0000	.35000	4.0000	.8200-02	.6700-02	.9200-02	.1257-03	.1026-03	.1417-03	.6600-01	.6820	537.0
13	1.0000	.37500	5.0000	.7600-02	.6200-02	.8600-02	.1165-03	.9506-04	.1314-03	.6100-01	.6400	538.7
13	1.0000	.40000	6.0000	.1090-01	.8900-02	.1230-01	.1671-03	.1363-03	.1884-03	.8700-01	.8970	537.9
13	1.0000	.42500	7.0000	.1410-01	.1150-01	.1590-01	.2163-03	.1765-03	.2438-03	.1130	1.173	537.7
13	1.0000	.45000	8.0000	.1810-01	.1480-01	.2040-01	.2778-03	.2267-03	.3132-03	.1450	1.485	538.0
13	1.0000	.47500	9.0000	.1890-01	.1540-01	.2130-01	.2902-03	.2368-03	.3272-03	.1510	1.543	538.2
13	1.0000	.50000	10.0000	.2500-01	.2040-01	.2820-01	.3634-03	.3128-03	.4322-03	.2000	2.029	538.2
13	1.0000	.52500	11.0000	.2510-01	.2050-01	.2830-01	.3855-03	.3144-03	.4346-03	.2010	2.039	538.4
13	1.0000	.55000	12.0000	.1950-01	.1510-01	.2090-01	.2843-03	.2320-03	.3205-03	.1480	1.494	537.5
13	1.0000	.60000	13.0000	.9200-02	.7500-02	.1040-01	.1417-03	.1156-03	.1598-03	.7400-01	.7510	537.7
13	1.0000	.65000	14.0000	.6000-02	.4900-02	.6800-02	.9242-04	.7542-04	.1042-03	.4800-01	.4900	537.4
13	1.0000	.70000	15.0000	.4300-02	.3500-02	.4800-02	.6581-04	.5371-04	.7417-04	.3400-01	.3370	537.0
13	1.0000	.75000	16.0000	.2200-02	.1800-02	.2400-02	.3314-04	.2705-04	.3735-04	.1700-01	.1760	536.6
13	1.0000	.80000	17.0000	.1800-02	.1400-02	.2000-02	.2688-04	.2194-04	.3029-04	.1400-01	.1370	536.6
13	1.0000	.85000	18.0000	.1220-01	.1000-01	.1380-01	.1874-03	.1529-03	.213-03	.9800-01	1.149	538.2
13	2.0000	.33700	19.0000	.1090-01	.8900-02	.1230-01	.1671-03	.1363-03	.1883-03	.8700-01	1.031	537.7
13	2.0000	.39000	20.0000	.1900-01	.1550-01	.2140-01	.2910-03	.2374-03	.3281-03	.1520	1.794	538.0
13	2.0000	.42600	21.0000	.2410-01	.1970-01	.2720-01	.3703-03	.3021-03	.4175-03	.1930	2.269	538.3
13	2.0000	.47800	22.0000	.2390-01	.1950-01	.2700-01	.3669-03	.2993-03	.4136-03	.1910	2.136	538.2

DATE 07 OCT 75

OH-7A (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 314

(RV80C5)

OH-7A (AEDC V41B-88A) B62C12F10H18H127E52V68R19

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAH	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTHOT DEG. R /SEC	TH DEG. R
13	2.0000	.53000	23.000	.1280-01	.1050-01	.1440-01	.1968-03	.1604-03	.2216-03	.1030	1.147	537.4
13	2.0000	.56700	24.000	.8100-02	.6500-02	.9200-02	.1247-03	.1018-03	.1406-03	.6500-01	.7100	537.4
13	2.0000	.62000	25.000	.5800-02	.4700-02	.6500-02	.8825-04	.7020-04	.9947-04	.4600-01	.5020	537.3
13	2.0000	.67000	26.000	.5900-02	.4800-02	.6700-02	.9100-04	.7427-04	.1026-03	.4800-01	.5190	536.8
13	2.0000	.70500	27.000	.3700-02	.3000-02	.4200-02	.5720-04	.4669-04	.6446-04	.3000-01	.3230	536.4
13	2.0000	.75000	28.000	.2600-02	.2100-02	.3000-02	.4029-04	.3289-04	.4539-04	.2100-01	.2320	535.9
13	2.0000	.80000	29.000	.1800-02	.1500-02	.2000-02	.2762-04	.2255-04	.3112-04	.1400-01	.1600	536.0
13	2.0000	.82400	30.000	.3000-03	.2000-03	.3000-03	.3989-05	.3256-05	.4494-05	.2000-02	.2900-01	536.2
13	3.0000	.20000	31.000	.2410-01	.1960-01	.2720-01	.3693-03	.3010-03	.4165-03	.1920	2.035	540.6
13	3.0000	.22500	32.000	.2020-01	.1650-01	.2280-01	.3100-03	.2527-03	.3496-03	.1610	1.806	540.1
13	3.0000	.25000	33.000	.1650-01	.1350-01	.1860-01	.2532-03	.2065-03	.2855-03	.1320	1.479	539.0
13	3.0000	.27500	34.000	.1270-01	.1040-01	.1440-01	.1959-03	.1595-03	.2204-03	.1020	1.224	538.2
13	3.0000	.30000	35.000	.1110-01	.9000-02	.1250-01	.1695-03	.1383-03	.1910-03	.8800-01	1.098	537.7
13	3.0000	.32500	36.000	.1280-01	.1030-01	.1420-01	.1929-03	.1574-03	.2174-03	.1010	1.184	537.5
13	3.0000	.35000	37.000	.1630-01	.1330-01	.1840-01	.2504-03	.2043-03	.2822-03	.1310	1.520	537.7
13	3.0000	.37500	38.000	.2470-01	.2020-01	.2780-01	.3788-03	.3090-03	.4270-03	.1980	2.323	537.8
13	3.0000	.40000	39.000	.2110-01	.1720-01	.2380-01	.3234-03	.2638-03	.3645-03	.1690	1.994	537.9
13	3.0000	.42500	40.000	.2080-01	.1690-01	.2340-01	.3183-03	.2597-03	.3588-03	.1660	1.974	537.7
13	3.0000	.45000	41.000	.1670-01	.1350-01	.1880-01	.2560-03	.2089-03	.2886-03	.1340	1.531	537.5
13	3.0000	.47500	42.000	.1250-01	.1020-01	.1410-01	.1917-03	.1584-03	.2160-03	.1000+00	1.118	537.5
13	3.0000	.50000	43.000	.9600-02	.7800-02	.1080-01	.1466-03	.1196-03	.1652-03	.7710-01	.8550	537.4
13	3.0000	.52500	44.000	.7200-02	.5900-02	.8200-02	.1112-03	.9073-04	.1253-03	.5800-01	.6840	536.8
13	3.0000	.55000	45.000	.6600-02	.5400-02	.7400-02	.1007-03	.9219-04	.1135-03	.5300-01	.5880	536.7
13	3.0000	.60000	46.000	.4700-02	.3900-02	.5300-02	.7273-04	.5937-04	.8196-04	.3800-01	.4150	536.4
13	3.0000	.65000	47.000	.2500-02	.2000-02	.2800-02	.3769-04	.3073-04	.4242-04	.2000-01	.2100	536.1
13	3.0000	.70000	48.000	.2000-02	.1700-02	.2300-02	.3114-04	.2542-04	.3509-04	.1600-01	.1810	535.8
13	3.0000	.75000	49.000	.1800-02	.1500-02	.2100-02	.2818-04	.2301-04	.3175-04	.1500-01	.1610	535.7
13	3.0000	.80000	50.000	.2900-02	.2400-02	.3300-02	.4435-04	.3621-04	.4996-04	.2300-01	.2500	535.7
13	3.0000	.85000	51.000	.9000-03	.8000-03	.1100-02	.1452-04	.1185-04	.1637-04	.8000-02	.9400-01	537.0
13	3.0000	.87500	52.000	.3000-03	.2000-03	.3000-03	.3890-05	.3175-05	.4384-05	.2000-02	.2500-01	537.0
13	3.0000	.90000	53.000	.5000-03	.4000-03	.6000-03	.7629-05	.6225-05	.8598-05	.4000-02	.5600-01	537.2
13	3.0000	.92500	54.000	.5000-03	.4000-03	.6000-03	.8362-05	.6823-05	.9424-05	.4000-02	.5700-01	537.2
13	3.0000	.95000	55.000	.2000-03	.2000-03	.2000-03	.2857-05	.2331-05	.3219-05	.1000-02	.1500-01	536.9
13	4.0000	.20000	.000	.3070-01	.2500-01	.3470-01	.4711-03	.3837-03	.5316-03	.2430	2.784	542.4
13	4.0000	.22500	.000	.2280-01	.1860-01	.2570-01	.3493-03	.2848-03	.3940-03	.1810	2.129	540.4
13	4.0000	.25000	73.000	.1750-01	.1420-01	.1970-01	.2678-03	.2183-03	.3020-03	.1390	1.634	540.0
13	4.0000	.27500	74.000	.1610-01	.1310-01	.1820-01	.2471-03	.2015-03	.2786-03	.1290	1.595	539.1
13	4.0000	.30000	56.000	.1560-01	.1280-01	.1760-01	.2398-03	.1956-03	.2793-03	.1250	1.642	538.3
13	4.0000	.32500	57.000	.2100-01	.1710-01	.2370-01	.3211-03	.2627-03	.3631-03	.1680	2.205	538.3
13	4.0000	.35000	58.000	.2170-01	.1770-01	.2440-01	.3322-03	.2710-03	.3744-03	.1730	2.275	538.2
13	4.0000	.37500	59.000	.1530-01	.1250-01	.1730-01	.2347-03	.1915-03	.2646-03	.1220	1.610	537.7
13	4.0000	.40000	60.000	.1050-01	.8600-02	.1190-01	.1613-03	.1316-03	.1818-03	.8400-01	1.107	537.3
13	4.0000	.42500	61.000	.7700-02	.6300-02	.8700-02	.1177-03	.9607-04	.1327-03	.6100-01	.8080	537.4

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 315

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

(RV8005)

RUN NUMBER	TRA'E	X/L	T/C NO	W/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
13	4.0000	.45000	62.000	.6000-02	.4900-02	.6700-02	.9143-04	.7461-04	.1030-03	.4800-01	.6711	537.1
13	4.0000	.47500	63.000	.4900-02	.4000-02	.5500-02	.7482-04	.6107-04	.8432-04	.3900-01	.4500	536.8
13	4.0000	.50000	64.000	.4400-02	.3600-02	.5000-02	.6768-04	.5524-04	.7627-04	.3500-01	.4400	536.6
13	4.0000	.52500	65.000	.2500-02	.2000-02	.2800-02	.3788-04	.3031-04	.4268-04	.2000-01	.2460	536.7
13	4.0000	.55000	66.000	.2800-02	.2300-02	.3100-02	.4272-04	.3486-04	.4813-04	.2200-01	.2630	536.6
13	4.0000	.60000	67.000	.2100-02	.1700-02	.2400-02	.3209-04	.2620-04	.3616-04	.1700-01	.1900	46.2
13	4.0000	.65000	68.000	.1300-02	.1100-02	.1500-02	.1994-04	.1628-04	.2247-04	.1000-01	.1230	536.4
13	4.0000	.70000	69.000	.8000-03	.6000-03	.8000-03	.1154-04	.9419-05	.1301-04	.6000-02	.6700-01	536.9
13	4.0000	.75000	70.000	.9000-03	.8000-03	.1100-02	.1430-04	.1168-04	.1612-04	.7000-02	.8400-01	536.1
13	4.0000	.87500	77.000	.3000-03	.3000-03	.4000-03	.5370-05	.4383-05	.6051-05	.3000-02	.3700-01	536.5
13	4.0000	.90000	78.000	.4000-03	.3000-03	.5000-03	.6405-05	.5227-05	.7217-05	.3000-02	.4400-01	536.8
13	4.0000	.92500	79.000	.6000-03	.5000-03	.6000-03	.8755-05	.7146-05	.9865-05	.5000-02	.5700-01	536.5
13	4.0000	.95000	80.000	.1600-02	.1300-02	.1800-02	.2458-04	.2005-04	.2772-04	.0000	.0000	583.2

DATE 07 OCT 75

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 316

ORBITER FUSELAGE

04-74 (AEDC V418-B8A) B62C12F10H16H127E52V8R19

(RV8005)

PARAMETRIC DATA

BETA = -2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
14	7.880	29.83	82.40	1177.	90.19	-1.900	87.70	.9000-02	.4050	3616.	.8906-05	.7062-07

RUN NUMBER	RN/L X10 6 /FT	HREF BTU/ R FT2SEC	STN NO R R
14	.4561	.1536-01	.6002-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H(GTO) BTU/ R FT2SEC	H(ITO) BTU/ R FT2SEC	H(THW) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
14	1.0000	.27500	1.0000	.1280-01	.1040-01	.1440-01	.1960-03	.1599-03	.2210-03	.1020	1.060	538.7
14	1.0000	.30000	2.0000	.1110-01	.9000-02	.1250-01	.1699-03	.1386-03	.1916-03	.8800-01	.9410	538.5
14	1.0000	.32500	3.0000	.9700-02	.7900-02	.1100-01	.1495-03	.1220-03	.1685-03	.7800-01	.8030	537.9
14	1.0000	.35000	4.0000	.1010-01	.8200-02	.1140-01	.1548-03	.1263-03	.1745-03	.8100-01	.8390	537.8
14	1.0000	.37500	5.0000	.1090-01	.8900-02	.1230-01	.1678-03	.1368-03	.1891-03	.8700-01	.9210	538.5
14	1.0000	.40000	6.0000	.1730-01	.1410-01	.1950-01	.2551-03	.2162-03	.2988-03	.1380	1.422	538.3
14	1.0000	.42500	7.0000	.1810-01	.1470-01	.2040-01	.2711-03	.2264-03	.3129-03	.1440	1.501	538.7
14	1.0000	.45000	8.0000	.2020-01	.1650-01	.2280-01	.3100-03	.2529-03	.3495-03	.1610	1.654	538.6
14	1.0000	.47500	9.0000	.2280-01	.1860-01	.2570-01	.3504-03	.2857-03	.3951-03	.1820	1.859	539.1
14	1.0000	.50000	10.000	.1760-01	.1440-01	.1990-01	.2710-03	.2210-03	.3055-03	.1410	1.433	538.4
14	1.0000	.52500	11.000	.1370-01	.1110-01	.1540-01	.2096-03	.1710-03	.2363-03	.1090	1.110	538.0
14	1.0000	.55000	12.000	.1150-01	.9400-02	.1300-01	.1772-03	.1446-03	.1997-03	.9200-01	.9300	537.9
14	1.0000	.60000	13.000	.7600-02	.6200-02	.8500-02	.1164-03	.9497-04	.1312-03	.6100-01	.6170	537.4
14	1.0000	.65000	14.000	.6800-02	.5500-02	.7700-02	.1044-03	.8422-04	.1177-03	.5500-01	.5540	537.3
14	1.0000	.70000	.5.000	.5100-02	.4100-02	.5700-02	.7802-04	.6367-04	.8793-04	.4100-01	.4000	537.0
14	1.0000	.75000	16.000	.2500-02	.2000-02	.2800-02	.3793-04	.3095-04	.4274-04	.2000-01	.2010	537.0
14	1.0000	.80000	17.000	.1300-02	.1100-02	.1500-02	.1987-04	.1621-04	.2239-04	.1000-01	.1010	536.7
14	1.0000	.85000	18.000	.1380-01	.1130-01	.1560-01	.2121-03	.1730-03	.2392-03	.1110	1.300	538.3
14	2.0000	.28500	19.000	.1280-01	.1040-01	.1440-01	.1966-03	.1604-03	.2215-03	.1030	1.212	537.7
14	2.0000	.39000	20.000	.2560-01	.2080-01	.2880-01	.3202-03	.4425-03	.2040	2.417	538.4	538.4
14	2.0000	.42600	21.000	.2330-01	.1900-01	.2620-01	.3575-03	.2916-03	.4030-03	.1860	2.190	538.3
14	2.0000	.47800	22.000	.1420-01	.1160-01	.1600-01	.2176-03	.1776-03	.2453-03	.1140	1.269	537.6

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 317

OH-74 (AEDC V41B-B8A) B62C12F10M16W127E52V8R19

(RV8005)

RUN NUMBER	TRAJ.E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAH BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTWOT DEG. R /SEC	TH DEG. R
14	2.0000	.53000	23.000	.8900-02	.7300-02	.1000-01	.1265-03	.1114-03	.1539-03	.7100-01	.7960	537.5
14	2.0000	.56700	24.000	.6800-02	.5600-02	.7700-02	.1050-03	.8572-04	.1184-03	.5500-01	.5980	537.3
14	2.0000	.62000	25.000	.5700-02	.4700-02	.6500-02	.8823-04	.7200-04	.9943-04	.4800-01	.5030	537.0
14	2.0000	.67000	26.000	.7300-02	.6000-02	.8200-02	.1122-03	.9161-04	.1264-03	.5900-01	.6410	535.9
14	2.0000	.70500	27.000	.6100-02	.4900-02	.6800-02	.9292-04	.7586-04	.1047-03	.4900-01	.5260	535.9
14	2.0000	.75000	28.000	.2200-02	.1800-02	.2500-02	.3379-04	.2759-04	.3807-04	.1800-01	.1950	535.8
14	2.0000	.80000	29.000	.1500-02	.1200-02	.1700-02	.2341-04	.1911-04	.2638-04	.1200-01	.1360	536.0
14	2.0000	.82400	30.000	.4000-03	.3000-03	.4000-03	.5821-05	.4752-05	.6559-05	.3000-02	.4300-01	536.2
14	3.0000	.20000	31.000	.2690-01	.2190-01	.3040-01	.4136-03	.3370-03	.4667-03	.2140	2.275	541.4
14	3.0000	.22500	32.000	.2250-01	.1840-01	.2540-01	.3458-03	.2819-03	.3907-03	.1790	2.011	540.7
14	3.0000	.25000	33.000	.1880-01	.1530-01	.2120-01	.2882-03	.2350-03	.3250-03	.1500	1.682	539.3
14	3.0000	.27500	34.000	.1500-01	.1220-01	.1690-01	.2297-03	.1874-03	.2589-03	.1200	1.438	538.2
14	3.0000	.30000	35.000	.1300-01	.1060-01	.1470-01	.2001-03	.1632-03	.2255-03	.1040	1.296	537.6
14	3.0000	.32500	36.000	.1590-01	.1300-01	.1790-01	.2438-03	.1989-03	.2748-03	.1270	1.496	537.6
14	3.0000	.35000	37.000	.2300-01	.1870-01	.2590-01	.3525-03	.2876-03	.3974-03	.1840	2.138	538.1
14	3.0000	.37500	38.000	.2490-01	.2030-01	.2800-01	.3819-03	.3115-03	.4305-03	.1990	2.341	538.1
14	3.0000	.40000	39.000	.1460-01	.1190-01	.1650-01	.2244-03	.1831-03	.2529-03	.1170	1.385	537.3
14	3.0000	.42500	40.000	.1440-01	.1180-01	.1630-01	.2216-03	.1809-03	.2498-03	.1160	1.376	537.3
14	3.0000	.45000	41.000	.1170-01	.9600-02	.1320-01	.1804-03	.1472-03	.2032-03	.9400 01	1.081	536.7
14	3.0000	.47500	42.000	.9800-02	.8000-02	.1110-01	.1510-03	.1232-03	.1701-03	.7900-01	.8810	537.1
14	3.0000	.50000	43.000	.8400-02	.6300-02	.9500-02	.1290-03	.1053-03	.1454-03	.6700-01	.7540	536.6
14	3.0000	.52500	44.000	.6000-02	.4900-02	.6800-02	.9222-04	.7527-04	.1039-03	.4800-01	.5680	536.4
14	3.0000	.55000	45.000	.6000-02	.4900-02	.6800-02	.9244-04	.7546-04	.1042-03	.4800-01	.5410	536.3
14	3.0000	.60000	46.000	.4300-02	.3500-02	.4900-02	.6617-04	.5402-04	.7455-04	.3500-01	.3780	536.1
14	3.0000	.65000	47.000	.4400-02	.3600-02	.5000-02	.6792-04	.5545-04	.7653-04	.3600-01	.3790	536.1
14	3.0000	.70000	48.000	.2100-02	.1700-02	.2300-02	.3175-04	.2592-04	.3577-04	.1700-01	.1840	535.8
14	3.0000	.75000	49.000	.1600-02	.1300-02	.1800-02	.2519-04	.2057-04	.2838-04	.1300-01	.1440	535.7
14	3.0000	.80000	50.000	.6000-03	.5000-03	.7000-03	.9499-05	.7756-05	.1070-04	.5000-02	.5300-01	535.8
14	3.0000	.85000	51.000	.3000-02	.2500-02	.3400-02	.4634-04	.3783-04	.5221-04	.2400-01	.3010	536.0
14	3.0000	.87500	52.000	.1400-02	.1100-02	.1500-02	.2081-04	.1699-04	.2346-04	.1100-01	.1350	536.9
14	3.0000	.90000	53.000	.4000-03	.3000-03	.4000-03	.5547-05	.4527-05	.6252-05	.3000-02	.4000-01	537.1
14	3.0000	.92500	54.000	.9000-03	.8000-03	.1100-02	.1438-04	.1174-04	.1621-04	.8000-02	.9900-01	537.1
14	3.0000	.95000	55.000	.4000-03	.3000-03	.4000 03	.5959-05	.4864-05	.6716-05	.3000-02	.3200-01	536.8
14	4.0000	.20000	71.000	.3170-01	.2580-01	.3583-01	.4867-03	.3963-03	.5494-03	.2510	2.871	543.2
14	4.0000	.22500	72.000	.2340-01	.1910-01	.2640-01	.3596-03	.2930-03	.4056-03	.1860	2.188	541.1
14	4.0000	.25000	73.000	.2110-01	.1720-01	.2380-01	.3236-03	.2638-03	.3650-03	.1680	1.973	540.3
14	4.0000	.27500	74.000	.1790-01	.1460-01	.2010-01	.2743-03	.2236-03	.3093-03	.1430	1.768	539.6
14	4.0000	.30000	56.000	.1850-01	.1510-01	.2090-01	.3252-03	.2653-03	.3666-03	.1690	2.226	538.5
14	4.0000	.33.000	57.000	.2120-01	.1730-01	.2350-01	.3252-03	.2653-03	.3666-03	.1690	2.226	538.5
14	4.0000	.35000	58.000	.1570-01	.1280-01	.1770-01	.2408-03	.1964-03	.2714-03	.1260	1.650	537.9
14	4.0000	.37500	59.000	.1130-01	.9200-02	.1270-01	.1729-03	.1411-03	.1949-03	.9000-01	1.188	537.1
14	4.0000	.40000	60.000	.1050-01	.8600-02	.1180-01	.1611-03	.1315-03	.1816-03	.8400-01	1.108	536.7
14	4.0000	.42500	61.000	.7100-02	.5800-02	.8000-02	.1096-03	.8942-04	.1235-03	.5700-01	.7530	536.6

DATE 07 OCT 75

OH-74 (AEDC V41B-B1A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 318

OH-74 (AEDC V41B-B8A) B62C12F10M16M127E52V6R19

(RV8005)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=C.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R FT2SEC	H1T0 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TW DEG. R
14	4.0000	.45000	62.000	.5700-02	.4700-02	.6400-02	.8761-04	.7151-04	.9873-04	.4600-01	.5960	536.5
14	4.0000	.47500	63.000	.4400-02	.3600-02	.4900-02	.6727-04	.5491-04	.7580-04	.3500-01	.4490	536.5
14	4.0000	.50000	64.000	.3700-02	.3000-02	.4100-02	.5636-04	.4601-04	.6351-04	.2900-01	.3660	536.2
14	4.0000	.52500	65.000	.3900-02	.3200-02	.4400-02	.5941-04	.4850-04	.6695-04	.3100-01	.3860	536.5
14	4.0000	.55000	66.000	.4200-02	.3400-02	.4700-02	.6386-04	.5213-04	.7195-04	.3300-01	.3930	536.2
14	4.0000	.57500	67.000	.2000-02	.1700-02	.2300-02	.3106-04	.2536-04	.3500-04	.1600-01	.1840	536.1
14	4.0000	.60000	68.000	.7000-03	.6000-03	.8000-03	.1083-04	.8839-05	.1220-04	.6000-02	.6700-01	536.6
14	4.0000	.62500	69.000	.9000-03	.7000-03	.1000-02	.1400-04	.1142-04	.1577-04	.7000-02	.8200-01	537.1
14	4.0000	.65000	70.000	.1500-02	.1300-02	.1700-02	.2351-04	.1920-04	.2649-04	.1200-01	.1380	535.9
14	4.0000	.67500	71.000	.2000-03	.2000-03	.3000-03	.3623-05	.3120-05	.4308-05	.2000-02	.2400-01	536.8
14	4.0000	.69000	72.000	.2000-03	.1000-03	.2000-03	.2378-05	.1941-05	.2680-05	.1000-02	.1500-01	536.6
14	4.0000	.70500	73.000	.2000-03	.2000-03	.2000-03	.2940-05	.2400-05	.3313-05	.2000-02	.2000-01	536.1
14	4.0000	.72000	74.000	.6000-03	.5000-03	.7000-03	.9012-05	.7356-05	.1016-04	.5000-02	.6100-01	536.4
14	4.0000	.73500	75.000	.4000-03	.4000-03	.5000-03	.6774-05	.5529-05	.7634-05	.4000-02	.4400-01	536.7
14	4.0000	.75000	76.000	.1600-02	.1300-02	.1800-02	.2458-04	.2005-04	.2772-04	.0000	.0000	583.3

DATE 07 OCT 75

OH-7A (AEDC V410-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 319

OH-7A (AEDC V410-88A) BE2C12F10H16W127E52V8R19

(RVB305)

ORBITER FUSELAGE

PARAMETRIC DATA

BETA = -2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

TEST CONDITIONS

RUN NUMBER	MACH	ALPHA DEG.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
15	7.880	39.71	82.30	1177.	-166.2	-2.400	87.70	5.000-02	4.040	3616.	.8889-05	.7062-37

RUN NUMBER	RN/L X10 ⁶ /FT	HREF BTU/ R FT ² SEC	STN NO R= .0175
15	.4552	.1534-01	.6008-01

TEST DATA

RUN NUMBER	TRACE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT ² SEC	H1T01 BTU/ R FT ² SEC	H1TAH BTU/ R FT ² SEC	QWOT BTU/ FT ² SEC	DTWOT DEG. R /SEC	W DEG. R
15	1.0000	.275-0	1.0000	.1160-01	.9400-02	.1300-01	.1776-03	.1449-03	.2002-03	.9300-01	.9630	537.8
15	1.0000	.13000	2.0000	.9900-02	.8100-02	.1120-01	.1525-03	.1244-03	.1718-03	.8000-01	.8470	537.6
15	1.0000	.32503	3.0000	.8600-02	.6500-02	.9000-02	.1223-03	.9983-04	.1379-03	.6400-01	.6580	537.5
15	1.0000	.35000	4.0000	.1420-01	.1160-01	.1600-01	.2181-03	.1780-03	.2458-03	.1140	1.184	537.1
15	1.0000	.37500	5.0000	.1400-01	.1140-01	.1580-01	.2148-03	.1753-03	.2421-03	.1120	1.181	537.8
15	1.0000	.40000	6.0000	.1340-01	.1090-01	.1510-01	.2055-03	.1676-03	.2316-03	.1070	1.105	537.3
15	1.0000	.42530	7.0000	.1490-01	.1220-01	.1680-01	.2291-03	.1869-03	.2582-03	.1200	1.242	537.7
15	1.0000	.45000	8.0000	.1250-01	.1020-01	.1410-01	.1917-03	.1565-03	.2161-03	.1000+00	1.026	537.3
15	1.0000	.47500	9.0000	.1070-01	.8700-02	.1200-01	.1640-03	.1338-03	.1849-03	.8600-01	.8730	537.7
15	1.0000	.50009	10.000	.1020-01	.8300-02	.1150-01	.1560-03	.1272-03	.1758-03	.8100-01	.8270	537.5
15	1.0000	.52500	11.000	.8800-02	.7200-02	.9900-02	.1350-03	.1101-03	.1522-03	.7000-01	.7160	537.5
15	1.0000	.55000	12.000	.7400-02	.6100-02	.8400-02	.1140-03	.9304-04	.1285-03	.6000-01	.6000	537.1
15	1.0000	.60000	13.000	.5700-02	.4600-02	.6400-02	.8705-04	.7105-04	.9810-04	.4500-01	.4620	536.8
15	1.0000	.65000	14.000	.3300-02	.2700-02	.3800-02	.5128-04	.4185-04	.5778-04	.2700-01	.2720	536.6
15	1.0000	.70000	15.000	.1500-02	.1200-02	.1700-02	.2248-04	.1835-04	.2533-04	.1200-01	.1150	536.2
15	1.0000	.75000	16.000	.1800-02	.1500-02	.2100-02	.2822-04	.2303-04	.3180-04	.1500-01	.1500	536.7
15	1.0000	.80000	17.000	.1400-02	.1200-02	.1600-02	.2223-04	.1815-04	.2505-04	.1200-01	.1130	536.2
15	2.0000	.28500	16.000	.1230-01	.1000-01	.1390-01	.1887-03	.1540-03	.2176-03	.9800-01	1.159	537.3
15	2.0000	.33700	19.000	.1710-01	.1400-01	.1930-01	.2625-03	.2142-03	.2958-03	.1370	1.621	537.3
15	2.0000	.39000	20.000	.1510-01	.1240-01	.1710-01	.2322-03	.1895-03	.2617-03	.1210	1.435	537.1
15	2.0000	.42600	21.000	.1360-01	.1110-01	.1530-01	.2081-03	.1698-03	.2345-03	.1090	1.279	537.0
15	2.0000	.47800	22.000	.9700-02	.7900-02	.1090-01	.1483-03	.1210-03	.1671-03	.7700-01	.8660	537.0

DATE 07 OCT 75

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 320

04-74 (AEDC V418-B8A) B62C12T10M16H1E7E52V8R19

(RVB005)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAH	H(170) BTU/ R FT2SEC	H(170) BTU/ R FT2SEC	H(170) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TM DEG. R
15	2.0000	.53000	23.000	.7000-02	.5700-02	.7900-02	.8079-03	.8079-03	.8079-03	.5600-01	.5300	536.9
15	2.0000	.56700	24.000	.5500-02	.4500-02	.6100-02	.8370-04	.8370-04	.8370-04	.4400-01	.4770	536.4
15	2.0000	.62000	25.000	.3200-02	.2600-02	.3600-02	.4908-04	.4908-04	.4908-04	.2600-01	.2800	536.4
15	2.0000	.67000	26.000	.2300-02	.1800-02	.2500-02	.3457-04	.3457-04	.3457-04	.1800-01	.1970	536.1
15	2.0000	.70500	27.000	.1200-02	.1000-02	.1300-02	.1814-04	.1814-04	.1814-04	.9000-02	.1030	535.7
15	2.0000	.75000	28.000	.1200-02	.1000-02	.1300-02	.1792-04	.1792-04	.1792-04	.9000-02	.1030	535.5
15	2.0000	.80000	29.000	.3000-03	.3000-03	.4000-03	.5154-05	.5154-05	.5154-05	.3000-02	.3000-01	535.8
15	3.0000	.20000	31.000	.2560-01	.2090-01	.2890-01	.3927-03	.3927-03	.3927-03	.2040	2.167	540.1
15	3.0000	.22500	32.000	.2160-01	.1760-01	.2430-01	.3311-03	.3311-03	.3311-03	.1720	1.933	539.2
15	3.0000	.25000	33.000	.1670-01	.1370-01	.1890-01	.2565-03	.2565-03	.2565-03	.1340	1.504	538.0
15	3.0000	.27500	34.000	.1350-01	.1100-01	.1520-01	.2068-03	.2068-03	.2068-03	.1080	1.298	537.2
15	3.0000	.30000	35.000	.1400-01	.1150-01	.1580-01	.2155-03	.2155-03	.2155-03	.1130	1.398	536.7
15	3.0000	.32500	36.000	.1870-01	.1520-01	.2100-01	.2865-03	.2865-03	.2865-03	.1500	1.761	537.0
15	3.0000	.35000	37.000	.1630-01	.1310-01	.1810-01	.2460-03	.2460-03	.2460-03	.1290	1.497	536.8
15	3.0000	.37500	38.000	.1430-01	.1170-01	.1610-01	.2197-03	.2197-03	.2197-03	.1150	1.351	536.7
15	3.0000	.40000	39.000	.9800-02	.8000-02	.1110-01	.1508-03	.1508-03	.1508-03	.7900-01	.9330	536.5
15	3.0000	.42500	40.000	.9100-02	.7400-02	.1020-01	.1392-03	.1392-03	.1392-03	.7300-01	.8660	536.4
15	3.0000	.45000	41.000	.7700-02	.6300-02	.8700-02	.1187-03	.1187-03	.1187-03	.6200-01	.7120	536.2
15	3.0000	.47500	42.000	.4800-02	.3900-02	.5400-02	.7351-04	.7351-04	.7351-04	.3800-01	.4300	536.1
15	3.0000	.50000	43.000	.4100-02	.3300-02	.4600-02	.6295-04	.6295-04	.6295-04	.3300-01	.3680	536.1
15	3.0000	.52500	44.000	.3600-02	.3000-02	.4200-02	.5763-04	.5763-04	.5763-04	.3000-01	.3250	535.6
15	3.0000	.55000	45.000	.3600-02	.3000-02	.4200-02	.5551-04	.5551-04	.5551-04	.2900-01	.3250	535.5
15	3.0000	.60000	46.000	.2200-02	.1400-02	.2500-02	.3452-04	.3452-04	.3452-04	.1800-01	.1970	535.5
15	3.0000	.70000	48.000	.5030-03	.4000-03	.6000-03	.7688-05	.7688-05	.7688-05	.4000-02	.4500-01	535.4
15	3.0000	.75000	49.000	.6000-03	.5000-03	.7000-03	.7899-05	.7899-05	.7899-05	.5000-02	.5500-01	535.5
15	3.0000	.80000	50.000	.1400-02	.1100-02	.1600-02	.2139-04	.2139-04	.2139-04	.1100-01	.1200	535.7
15	3.0000	.85000	51.000	.6000-03	.5000-03	.7000-03	.9908-05	.9908-05	.9908-05	.5000-02	.5400-01	536.9
15	3.0000	.87500	52.000	.0000	.0000	.0000	.4977-06	.4977-06	.4977-06	.0000	.3000-02	536.7
15	3.0000	.90000	53.000	.3000-03	.2000-03	.3000-03	.4512-05	.4512-05	.4512-05	.2000-02	.3300-01	536.8
15	3.0000	.92500	54.000	.6000-03	.5000-03	.7000-03	.9193-05	.9193-05	.9193-05	.5000-02	.6300-01	536.9
15	3.0000	.95000	55.000	.0000	.0000	.0000	.1254-06	.1254-06	.1254-06	.0000	.1000-02	536.7
15	4.0000	.20000	71.000	.2590-01	.2190-01	.3030-01	.4123-03	.4123-03	.4123-03	.2130	2.442	541.6
15	4.0000	.22500	72.000	.2140-01	.1750-01	.2420-01	.3268-03	.3268-03	.3268-03	.1710	2.008	539.7
15	4.0000	.25000	73.000	.1810-01	.1480-01	.2040-01	.2776-03	.2776-03	.2776-03	.1440	1.697	539.3
15	4.0000	.27500	74.000	.1690-01	.1390-01	.1910-01	.2593-03	.2593-03	.2593-03	.1350	1.676	538.5
15	4.0000	.30000	75.000	.1760-01	.1440-01	.1950-01	.2707-03	.2707-03	.2707-03	.1410	1.857	537.5
15	4.0000	.32500	76.000	.1290-01	.1050-01	.1450-01	.1972-03	.1972-03	.1972-03	.1030	1.355	536.9
15	4.0000	.35000	77.000	.1030-01	.8400-02	.1160-01	.1583-03	.1583-03	.1583-03	.8300-01	1.089	536.5
15	4.0000	.37500	78.000	.8300-02	.6700-02	.9300-02	.1266-03	.1266-03	.1266-03	.6600-01	.8710	536.4
15	4.0000	.40000	79.000	.5600-02	.4600-02	.6300-02	.8612-04	.8612-04	.8612-04	.4500-01	.5930	535.9
15	4.0000	.42500	80.000	.3900-02	.3200-02	.4400-02	.6051-04	.6051-04	.6051-04	.3200-01	.4170	535.8
15	4.0000	.45000	81.000	.3300-02	.2700-02	.3800-02	.5124-04	.5124-04	.5124-04	.2700-01	.3490	535.7
15	4.0000	.47500	82.000	.2600-02	.2100-02	.2900-02	.4003-04	.4003-04	.4003-04	.2100-01	.2680	535.6

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

OH-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 321

OH-74 (AEDC V41B-88A) B62C12F10M16H127E52V8R19

(RV8005)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAW	H19T01 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAM) BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DT DEL R /SEC	TA DEG. R
15	4.0000	.50000	64.000	.1600-02	.1300-02	.1800-02	.2394-04	.1955-04	.2657-04	.1300-01	.1560	535.5
15	4.0000	.52500	65.000	.1300-02	.1100-02	.1500-02	.2011-04	.1642-04	.2265-04	.1100-01	.13.0	535.7
15	4.0000	.55000	66.000	.8000-03	.6000-03	.9000-03	.1158-04	.9451-05	.1304-04	.6000-02	.7100-01	535.7
15	4.0000	.60000	67.000	.1100-02	.9000-03	.1200-02	.1644-04	.1342-04	.1852-04	.9000-02	.9700-01	535.6
15	4.0000	.70000	69.000	.7000-03	.6000-03	.8000-03	.1098-04	.8963-05	.1237-04	.6000-02	.6400-01	536.5
15	4.0000	.75000	70.000	.7000-03	.5000-03	.7000-03	.1017-04	.8299-05	.1145-04	.5000-02	.5900-01	536.0
15	4.0000	.80000	75.000	.0000	.0000	.0000	.2027-06	.1655-06	.2284-06	.0000	.1000-02	536.5
15	4.0000	.85000	76.000	.1700-02	.1400-02	.1900-02	.2567-04	.2093-04	.2889-04	.1300-01	.1600	536.2
15	4.0000	.87500	77.000	.2000-03	.2000-03	.2000-02	.2940-05	.2400-05	.3313-05	.2000-02	.2000-01	536.1
15	4.0000	.92500	79.000	.4000-03	.4000-03	.3000-03	.6774-05	.5529-05	.7634-05	.4000-02	.4400-01	536.7
15	4.0000	.95000	80.000	.2300-02	.1900-02	.2600-02	.3496-04	.2854-04	.3940-04	.0000	.0000	583.3

DATE 07 OCT 75

OH-7A (AEDC V-18-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 323

OH-7A (AEDC V-18-B8A) B82C12F10H16H127E52V8R19

(RV8005)

RUN NUMBER	TRA'E	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R-TAN	H(9TO) BTU/ R FT2SEC	H(10) BTU/ R FT2SEC	H(11A) BTU/ R FT2SEC	QOOT BTU/ FT2SEC	DTMDT DEG. R /SEC	TH DEG. R
26	2.0000	.53000	23.000	.1030-01	.8500-02	.1150-01	.2377-03	.1959-03	.2661-03	.1390	1.553	538.9
26	2.0000	.56700	24.000	.7600-02	.6200-02	.8500-02	.1754-03	.1446-03	.1863-03	.1030	1.121	538.0
26	2.0000	.62000	25.000	.5200-02	.4300-02	.5900-02	.1214-03	.1006-03	.1358-03	.7100-01	.7750	537.9
26	2.0000	.67000	26.000	.4100-02	.3400-02	.4600-02	.9486-04	.7821-04	.1062-03	.5600-01	.6070	537.5
26	2.0000	.70500	27.000	.1900-02	.1600-02	.2103-02	.4419-04	.3644-04	.4944-04	.2600-01	.2800	536.9
26	2.0000	.75000	28.000	.1100-02	.9000-03	.1200-02	.2516-04	.2075-04	.2816-04	.1500-01	.1630	536.4
26	2.0000	.80000	29.000	.9000-03	.7000-03	.1000-02	.2002-04	.1651-04	.2241-04	.1200-01	.1300	536.8
26	2.0000	.82400	30.000	.1000-03	.1000-03	.1000-03	.1405-05	.1159-05	.1573-05	.1000-02	.1200-01	536.9
26	2.0000	.82400	31.000	.2630-01	.2160-01	.2950-01	.6096-03	.5015-03	.6933-03	.3530	3.744	544.9
26	3.0000	.20000	31.000	.2160-01	.2160-01	.2950-01	.6096-03	.5015-03	.6933-03	.3530	3.744	544.9
26	3.0000	.22500	32.000	.2190-01	.1800-01	.2460-01	.5079-03	.4180-03	.5691-03	.2950	3.303	543.4
26	3.0000	.25000	33.000	.1800-01	.1480-01	.2010-01	.4167-03	.3431-03	.4667-03	.2430	2.722	541.4
26	3.0000	.27500	34.000	.1360-01	.1120-01	.1520-01	.3154-03	.2598-03	.3531-03	.1840	2.211	539.9
26	3.0000	.30000	35.000	.1190-01	.9800-02	.1330-01	.2761-03	.2276-03	.3728-03	.1950	2.291	538.8
26	3.0000	.32500	36.000	.1440-01	.1180-01	.1610-01	.3330-03	.2744-03	.3728-03	.1950	2.291	538.8
26	3.0000	.35000	37.000	.2510-01	.2060-01	.2810-01	.5807-03	.4783-03	.6503-03	.3390	3.938	540.7
26	3.0000	.37500	38.000	.2860-01	.2360-01	.3210-01	.6634-03	.5463-03	.7430-03	.3670	4.540	541.3
26	3.0000	.40000	39.000	.1740-01	.1430-01	.1950-01	.4032-03	.3322-03	.4513-03	.2360	2.788	539.0
26	3.0000	.42500	40.000	.1560-01	.1290-01	.1750-01	.3616-03	.2980-03	.4049-03	.2120	2.513	539.1
26	3.0000	.45000	41.000	.1230-01	.1010-01	.1380-01	.2848-03	.2347-03	.3188-03	.1670	1.911	538.4
26	3.0000	.47500	42.000	.8600-02	.7100-02	.9700-02	.2000-03	.1649-03	.2239-03	.1170	1.309	538.2
26	3.0000	.50000	43.000	.7100-02	.5800-02	.7900-02	.1634-03	.1347-03	.1829-03	.9500-01	1.071	537.9
26	3.0000	.52500	44.000	.5600-02	.4700-02	.6300-02	.1309-03	.1079-03	.1485-03	.7700-01	.9030	537.5
26	3.0000	.55000	45.000	.5200-02	.4300-02	.5800-02	.1204-03	.9924-04	.1347-03	.7100-01	.7890	537.4
26	3.0000	.60000	46.000	.3700-02	.3100-02	.4200-02	.9677-04	.7155-04	.9710-04	.5100-01	.5560	537.0
26	3.0000	.65000	47.000	.2300-02	.1900-02	.2500-02	.5273-04	.4348-04	.5900-04	.3100-01	.3300	536.7
26	3.0000	.70000	48.000	.7000-03	.5000-03	.7000-03	.1538-04	.1269-04	.1721-04	.9000-02	.1000+00	536.4
26	3.0000	.75000	49.000	.1000-02	.8000-03	.1100-02	.2256-04	.1861-04	.2524-04	.1300-01	.1450	536.5
26	3.0000	.80000	50.000	.1200-02	.1000-02	.1300-02	.2794-04	.2304-04	.3126-04	.1600-01	.1760	536.9
26	3.0000	.85000	51.000	.1000-03	.1000-03	.2000-03	.3123-05	.2574-05	.3495-05	.2000-02	.2300-01	538.1
26	3.0000	.87500	52.000	.7000-03	.5000-03	.7000-03	.1537-04	.1267-04	.1721-04	.9000-02	.1120	538.0
26	3.0000	.90000	53.000	.4000-03	.4700-03	.5000-03	.1002-04	.8256-05	.1121-04	.6000-02	.8200-01	538.3
26	3.0000	.92500	54.000	.2000-03	.1000-03	.9000-03	.1893-04	.1560-04	.2119-04	.1100-01	.1460	538.4
26	3.0000	.95000	55.000	.2000-03	.1000-03	.2000-03	.3627-05	.2990-05	.4060-05	.2000-02	.2200-01	538.1
26	4.0000	.20000	71.000	.2223-01	.1630-01	.2500-01	.6872-03	.5649-03	.7706-03	.3960	4.521	547.2
26	4.0000	.22500	72.000	.1730-01	.1420-01	.1940-01	.5162-03	.4247-03	.5785-03	.3506	3.506	544.6
26	4.0000	.25000	73.000	.1730-01	.1430-01	.1940-01	.4018-03	.3309-03	.4489-03	.2330	2.733	542.8
26	4.0000	.27500	74.000	.1900-01	.1570-01	.2130-01	.4406-03	.3629-03	.4934-03	.2340	2.900	541.7
26	4.0000	.30000	75.000	.2380-01	.1960-01	.2660-01	.5509-03	.4536-03	.6171-03	.2570	3.375	540.6
26	4.0000	.32500	76.000	.1690-01	.1390-01	.1890-01	.3908-03	.3219-03	.4376-03	.3210	4.209	541.8
26	4.0000	.35000	77.000	.1180-01	.9700-02	.1320-01	.2724-03	.2245-03	.3049-03	.2280	2.995	540.3
26	4.0000	.37500	78.000	.8500-02	.7000-02	.9500-02	.1960-03	.1615-03	.2193-03	.1590	2.095	538.7
26	4.0000	.40000	80.000	.6200-02	.5100-02	.6900-02	.1429-03	.1178-03	.1600-03	.1150	1.509	538.3
26	4.0000	.42500	81.000	.6200-02	.5100-02	.6900-02	.1429-03	.1178-03	.1600-03	.8400-01	1.102	537.6

DATE 07 OCT 75

04-74 (AEDC V418-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 324

(RV8005)

04-74 (AEDC V418-B8A) 862C12F10H16W127E53V8R19

RUN NUMBER	TRAKE	X/L	T/C NO	W/HREF 7-0.9	H/HREF R=1.0	H/HREF R=TAN	H/GTO BTU/ R FT2SEC	H/ITO BTU/ R FT2SEC	H/ITAM BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMOT DEG. R /SEC	TH DEG. R
26	4.0000	.45000	82.000	.5000-02	.4100-02	.5600-02	.1152-03	.9498-04	.1289-03	.6800-01	.8780	537.7
26	4.0000	.47500	83.000	.3700-02	.3100-02	.4200-02	.9672-04	.7150-04	.9705-04	.5100-01	.8500	537.4
26	4.0000	.50000	84.000	.2900-02	.2400-02	.3200-02	.6651-04	.5484-04	.7442-04	.3900-01	.4850	537.1
26	4.0000	.52500	85.000	.2400-02	.2000-02	.2700-02	.9547-04	.4573-04	.6207-04	.3300-01	.4040	537.3
26	4.0000	.55000	86.000	.2200-02	.1900-02	.2400-02	.5006-04	.4127-04	.5602-04	.2900-01	.3460	537.2
26	4.0000	.60000	87.000	.1500-02	.1200-02	.1600-02	.3359-04	.2778-04	.3770-04	.2000-01	.2230	536.9
26	4.0000	.65000	88.000	.1000-03	.3000-03	.4000-03	.9244-05	.7623-05	.1034-04	.5000-02	.6400-01	536.7
26	4.0000	.70000	89.000	.7000-03	.6000-03	.8000-03	.1692-04	.1395-04	.1894-04	.1000-01	.1110	537.8
26	4.0000	.75000	90.000	.6000-03	.5200-03	.7000-03	.1348-04	.1111-04	.1508-04	.8000-02	.8600-01	537.3
26	4.0000	.80000	91.000	.2000-03	.2000-03	.3000-03	.5604-05	.4619-05	.6273-05	.3000-02	.4000-01	538.2
26	4.0000	.85000	92.000	.4000-03	.3000-03	.5000-03	.9706-05	.8001-05	.1086-04	.6000-02	.6800-01	538.1
26	4.0000	.90000	93.000	.2000-03	.1000-03	.2000-03	.3847-05	.3171-05	.4307-05	.2000-02	.2900-01	538.2
26	4.0000	.92500	94.000	.6100-02	.5000-02	.6900-02	.1418-03	.1169-03	.1587-03	.8300-01	1.031	539.6
26	4.0000	.95000	95.000	.4000-03	.4000-03	.5000-03	.1014-04	.8357-05	.1135-04	.0000	.0000	583.3

REPRODUCIBILITY OF THE
ORIGINAL PAGE IS POOR

DATE 07 OCT 75

OH-74 (AEDC V41B-68A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 325

04-74 (AEDC V41B-88A) B62C12F10H16W127E52V8A19

(REV005)

ORIGINAL FUSE, AGE

PARAMETRIC DATA

BETA = -2.000 MACH = 8.000 ELEVON = .0000 RUDDER = .0000

...TEST CONDITIONS...

Run Number	Mach	Alpha Deg.	PO PSIA	TO DEG. R	PHI DEG.	YAW DEG.	T DEG. R	P PSIA	Q PSIA	V FT/SEC	RHO SLUGS /FT ³	MU LB-SEC /FT ²
27	7.040	30.75	187.7	124.7	-166.2	-2.400	91.60	-2000-01	.8910	3724.	.1849-04	.7377-07

3724. .1849-04 .7377-07

RUN NUMBER	RM/L X10 6 /FT	HREF 8TU/ R FTSEC	STN NO R= .0175
27	.9332	.2302-01	.4192-01

NUMBER	X10 6	BTU/ R	R=
--------	-------	--------	----

27 9332 10-2302-01 .4192-01

...TEST DATA...

RUN NUMBER	TRACE	X/Y	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19TD BTU/ R F125C	H170D BTU/ R F125C	H171D BTU/ R F125C	QOOT BTU/ R F125C	DTNOT -G. R /SEC	TH DEG. R
27	1.0000	.27500	1.0000	.1300-01	.1070-01	.1450-01	.2981-03	.2455-03	.3339-03	.1740	1.802	540.1
27	1.0000	.30000	2.0000	.1040-01	.8500-02	.1160-01	.2388-03	.1967-03	.2674-03	.1390	1.478	539.7
27	1.0000	.32500	3.0000	.9900-02	.8100-02	.1110-01	.2272-03	.1872-03	.2544-03	.1320	1.363	539.2
27	1.0000	.35000	4.0000	.1620-01	.1330-01	.1810-01	.3726-03	.3070-03	.4172-03	.2170	2.257	539.2
27	1.0000	.37500	5.0000	.1590-01	.1310-01	.1780-01	.3666-03	.3019-03	.4106-03	.2130	2.248	540.0
27	1.0000	.40000	6.0000	.1500-01	.1240-01	.1680-01	.3462-03	.2652-03	.3877-03	.2020	2.078	539.2
27	1.0000	.42500	7.0000	.1780-01	.1470-01	.2000-01	.4103-03	.3379-03	.4595-03	.2390	2.480	540.0
27	1.0000	.45000	8.0000	.1620-01	.1330-01	.1810-01	.3724-03	.3067-03	.4170-03	.2170	2.223	539.5
27	1.0000	.47500	9.0000	.1430-01	.1180-01	.1600-01	.3289-03	.2709-03	.3684-03	.1920	1.953	539.9
27	1.0000	.50000	10.000	.1950-01	.1270-01	.1730-01	.3559-03	.2932-03	.3985-03	.2070	2.106	539.3
27	1.0000	.52500	11.000	.1320-01	.1090-01	.1480-01	.3039-03	.2504-03	.3403-03	.1770	1.798	539.4
27	1.0000	.55000	12.000	.1050-01	.8600-02	.1170-01	.2408-03	.1934-03	.2686-03	.1410	1.414	538.7
27	1.0000	.60000	13.000	.6100-02	.5100-02	.6900-02	.1414-03	.1165-03	.1564-03	.8300-01	.8390	538.5
27	1.0000	.65000	14.000	.1800-02	.1500-02	.2003-02	.4143-04	.3415-04	.4637-04	.2400-01	2.460	537.6
27	1.0000	.70000	15.000	.1400-02	.1200-02	.1600-02	.3337-04	.2751-04	.3735-04	.2000-01	1.910	537.3
27	1.0000	.75000	16.000	.1500-02	.1200-02	.1600-02	.3342-04	.2753-04	.3741-04	.2000-01	1.990	537.4
27	1.0000	.80000	17.000	.6000-03	.5000-03	.7000-03	.1454-04	.1198-04	.1627-04	.9000-02	.8300-01	537.4
27	2.0000	.85000	18.000	.1100-01	.9500-02	.1290-01	.2643-03	.2177-03	.2951-03	.1540	1.806	540.6
27	2.0000	.90000	19.000	.1810-01	.1490-01	.2030-01	.4177-03	.3439-03	.4678-03	.2430	2.869	540.6
27	2.0000	.95000	20.000	.1660-01	.1370-01	.1860-01	.3816-03	.3143-03	.4274-03	.2220	2.625	540.0
27	2.0000	.42600	21.000	.1770-01	.1460-01	.1990-01	.4084-03	.3364-03	.4574-03	.2380	2.794	540.1
27	2.0000	.47800	22.000	.1230-01	.1010-01	.1380-01	.2831-03	.2332-03	.3170-03	.1650	1.841	539.6

27	1.0000	.27500	1.0000	.1300-01	.1070-01	.1450-01	.2981-03	.2455-03	.3339-03	.1740	1.802	540.1
27	1.0000	.30000	2.0000	.1040-01	.8500-02	.1160-01	.2308-03	.1967-03	.2544-03	.1390	1.478	539.7
27	1.0000	.32500	3.0000	.9900-02	.8100-02	.1110-01	.2272-03	.1872-03	.2674-03	.1320	1.363	539.2
27	1.0000	.35000	4.0000	.1620-01	.1330-01	.1810-01	.3726-03	.3070-03	.4172-03	.2170	2.257	539.2
27	1.0000	.37500	5.0000	.1590-01	.1310-01	.1780-01	.3666-03	.3019-03	.4106-03	.2130	2.248	540.0
27	1.0000	.40000	6.0000	.1500-01	.1240-01	.1680-01	.3462-03	.2652-03	.3877-03	.2020	2.078	539.2
27	1.0000	.42500	7.0000	.1780-01	.1470-01	.2000-01	.4103-03	.3379-03	.4595-03	.2390	2.480	540.0
27	1.0000	.45000	8.0000	.1620-01	.1330-01	.1810-01	.3724-03	.3067-03	.4170-03	.2170	2.223	539.5
27	1.0000	.47500	9.0000	.1430-01	.1180-01	.1600-01	.3289-03	.2709-03	.3684-03	.1920	1.953	539.9
27	1.0000	.50000	10.000	.1550-01	.1270-01	.1730-01	.3559-03	.2932-03	.3985-03	.2070	2.106	539.3
27	1.0000	.52500	11.000	.1320-01	.1090-01	.1480-01	.3039-03	.2504-03	.3403-03	.1770	1.799	539.4
27	1.0000	.55000	12.000	.1050-01	.8600-02	.1170-01	.2408-03	.1934-03	.3043-03	.1410	1.414	538.7
27	1.0000	.60000	13.000	.6100-02	.5100-02	.6900-02	.1414-03	.1165-03	.1564-03	.8300-01	.8390	538.5
27	1.0000	.65000	14.000	.1800-02	.1500-02	.2003-02	.4143-04	.3415-04	.4637-04	.2400-01	.2460	537.6
27	1.0000	.70000	15.000	.1400-02	.1200-02	.1600-02	.3337-04	.2751-04	.3735-04	.2000-01	1.910	537.3
27	1.0000	.75000	16.000	.1500-02	.1200-02	.1600-02	.3342-04	.2755-04	.3741-04	.2000-01	1.990	537.4
27	1.0000	.80000	17.000	.6000-03	.5000-03	.7000-03	.1454-04	.1198-04	.1627-04	.9000-02	.8300-01	537.4
27	1.0000	.85000	18.000	.1150-01	.9500-02	.1290-01	.2643-03	.2177-03	.2951-03	.1540	1.806	540.6
27	2.0000	.28500	19.000	.1810-01	.1490-01	.2030-01	.4177-03	.3439-03	.4678-03	.2430	2.869	540.6
27	2.0000	.33700	20.000	.1660-01	.1370-01	.1860-01	.3816-03	.3143-03	.4274-03	.2220	2.625	540.0
27	2.0000	.39000	21.000	.1770-01	.1460-01	.1990-01	.4084-03	.3364-03	.4574-03	.2380	2.794	540.1
27	2.0000	.42600	22.000	.1230-01	.1010-01	.1380-01	.2831-03	.2332-03	.3170-03	.1650	1.841	539.6

[illegible]

Year	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41	2041-42	2042-43	2043-44	2044-45	2045-46	2046-47	2047-48	2048-49	2049-50	2050-51	2051-52	2052-53	2053-54	2054-55	2055-56	2056-57	2057-58	2058-59	2059-60	2060-61	2061-62	2062-63	2063-64	2064-65	2065-66	2066-67	2067-68	2068-69	2069-70	2070-71	2071-72	2072-73	2073-74	2074-75	2075-76	2076-77	2077-78	2078-79	2079-80	2080-81	2081-82	2082-83	2083-84	2084-85	2085-86	2086-87	2087-88	2088-89	2089-90	2090-91	2091-92	2092-93	2093-94	2094-95	2095-96	2096-97	2097-98	2098-99	2099-00	2100-01	2101-02	2102-03	2103-04	2104-05	2105-06	2106-07	2107-08	2108-09	2109-10	2110-11	2111-12	2112-13	2113-14	2114-15	2115-16	2116-17	2117-18	2118-19	2119-20	2120-21	2121-22	2122-23	2123-24	2124-25	2125-26	2126-27	2127-28	2128-29	2129-30	2130-31	2131-32	2132-33	2133-34	2134-35	2135-36	2136-37	2137-38	2138-39	2139-40	2140-41	2141-42	2142-43	2143-44	2144-45	2145-46	2146-47	2147-48	2148-49	2149-50	2150-51	2151-52	2152-53	2153-54	2154-55	2155-56	2156-57	2157-58	2158-59	2159-60	2160-61	2161-62	2162-63	2163-64	2164-65	2165-66	2166-67	2167-68	2168-69	2169-70	2170-71	2171-72	2172-73	2173-74	2174-75	2175-76	2176-77	2177-78	2178-79	2179-80	2180-81	2181-82	2182-83	2183-84	2184-85	2185-86	2186-87	2187-88	2188-89	2189-90	2190-91	2191-92	2192-93	2193-94	2194-95	2195-96	2196-97	2197-98	2198-99	2199-00	2200-01	2201-02	2202-03	2203-04	2204-05	2205-06	2206-07	2207-08	2208-09	2209-10	2210-11	2211-12	2212-13	2213-14	2214-15	2215-16	2216-17	2217-18	2218-19	2219-20	2220-21	2221-22	2222-23	2223-24	2224-25	2225-26	2226-27	2227-28	2228-29	2229-30	2230-31	2231-32	2232-33	2233-34	2234-35	2235-36	2236-37	2237-38	2238-39	2239-40	2240-41	2241-42	2242-43	2243-44	2244-45	2245-46	2246-47	2247-48	2248-49	2249-50	2250-51	2251-52	2252-53	2253-54	2254-55	2255-56	2256-57	2257-58	2258-59	2259-60	2260-61	2261-62	2262-63	2263-64	2264-65	2265-66	2266-67	2267-68	2268-69	2269-70	2270-71	2271-72	2272-73	2273-74	2274-75	2275-76	2276-77	2277-78	2278-79	2279-80	2280-81	2281-82	2282-83	2283-84	2284-85	2285-86	2286-87	2287-88	2288-89	2289-90	2290-91	2291-92	2292-93	2293-94	2294-95	2295-96	2296-97	2297-98	2298-99	2299-00	2300-01	2301-02	2302-03	2303-0
------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	--------

27	1.0000	.35000	.1620-01	.1330-01	.1810-01	.3726-03	.3070-03	.4172-03	.2170	2.257	339.2
27	1.0000	.35000	.1620-01	.1330-01	.1810-01	.3726-03	.3070-03	.4172-03	.2170	2.257	339.2

27	1.0000	.37500	.1590-01	.1310-01	.1780-01	.3688-03	.3019-03	.4100-03	.6150	2.1670	5.1019
27	1.0000	.37500	.1590-01	.1310-01	.1780-01	.3688-03	.3019-03	.4100-03	.6150	2.1670	5.1019

[illegible][illegible]

27	1.0000	.47500	.1430-01	.1180-01	.1600-01	.3289-03	.2709-03	.3584-03	.1920	1.953	359.9
27	1.0000	.47500	.1430-01	.1180-01	.1600-01	.3289-03	.2709-03	.3584-03	.1920	1.953	359.9

[illegible][illegible]

	6100-02	.5100-02	.6900-02	.1414-03	.1165-03	.1584-03	.8300-01	.8390	538.5
27	1.0000	13.000							
27	1.0000	13.000							

	1970	1980	1990	2000	2010	2020
27	1.0000	.65000	14.000	.1800-02	.1500-02	.2003-02 .4143-04 .3415-04 .4637-04 .2400-01 .2460 537.6

27	1.0000	.70000	15.000	.1400-02	.1200-02	.1600-02	.3337-04	.2751-04	.3735-04	.2000-01	.1910	557.5
	1.0000	.70000	15.000	.1400-02	.1200-02	.1600-02	.3337-04	.2751-04	.3735-04	.2000-01	.1910	557.5

[illegible][illegible][illegible]

	27	2.0000	.39000	20.000	.1660-01	.1370-01	.1860-01	.3816-03	.3143-03	.4274-03	.2220	2.625	340.0
27		2.0000	.39000	20.000	.1660-01	.1370-01	.1860-01	.3816-03	.3143-03	.4274-03	.2220	2.625	340.0

[illegible][illegible]

DATE 07 OCT 75

OH-74 (AEDC V41B-B8A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 326

OH-74 (AEDC V41B-B8A) B62C12F10M16M127E52VBR19

(RVBL05)

RUN NUMBER	TPAE	X/L	T/C NO	H/REF R=0.9	H/REF R=1.0	H/REF R=TAN	H19T0 BTU/ R FT2SEC	H1T01 BTU/ R FT2SEC	H1TAN BTU/ R FT2SEC	QDOT BTU/ FT2SEC	DTMDT DEC. R /SEC	TM DEC. R
27	2.0000	.53000	23.000	.7800-02	.6500-02	.8800-02	.1806-03	.1488-03	.2023-03	.1050	1.177	538.9
27	2.0000	.56700	24.000	.5200-02	.4300-02	.5900-02	.1206-03	.9940-04	.1351-03	.7000-01	.7670	538.5
27	2.0000	.62000	25.000	.2600-02	.2200-02	.2900-02	.6065-04	.4999-04	.6789-04	.3500-01	.3863	537.9
27	2.0000	.67000	26.000	.2800-02	.2300-02	.3100-02	.6385-04	.5263-04	.7146-04	.3700-01	.4080	537.0
27	2.0000	.70500	27.000	.2900-02	.2400-02	.3200-02	.6854-04	.5485-04	.7448-04	.3900-01	.4200	537.3
27	2.0000	.75000	28.000	.2000-02	.1600-02	.2200-02	.4531-04	.3735-04	.5072-04	.2700-01	.2920	537.1
27	2.0000	.80000	29.000	.1400-02	.1100-02	.1500-02	.3162-04	.2607-04	.3540-04	.1900-01	.2050	537.2
27	2.0000	.82400	30.000	.6000-03	.5000-03	.7000-03	.1483-04	.1222-04	.1659-04	.9000-02	.1210	537.2
27	3.0000	.20000	31.000	.2660-01	.2190-01	.2980-01	.6127-03	.5040-03	.6868-03	.3540	3.759	544.0
27	3.0000	.22500	32.000	.2180-01	.1790-01	.2440-01	.5019-03	.4130-03	.5625-03	.2910	3.256	543.1
27	3.0000	.25000	33.000	.1670-01	.1380-01	.1870-01	.3951-03	.3170-03	.4314-03	.2240	2.506	541.7
27	3.0000	.27500	34.000	.1260-01	.1040-01	.1410-01	.2896-03	.2384-03	.3244-03	.1680	2.020	540.9
27	3.0000	.30000	35.000	.1330-01	.1100-01	.1490-01	.3053-03	.2523-03	.3431-03	.1780	2.212	540.1
27	3.0000	.32500	36.000	.2100-01	.1730-01	.2350-01	.4836-03	.3982-03	.5417-03	.2810	3.303	540.9
27	3.0000	.35000	37.000	.1800-01	.1480-01	.2010-01	.4134-03	.3405-03	.4631-03	.2410	2.798	540.3
27	3.0000	.37500	38.000	.1590-01	.1310-01	.1780-01	.3657-03	.3012-03	.4095-03	.2130	2.502	539.9
27	3.0000	.40000	39.000	.1210-01	.1000-01	.1360-01	.2792-03	.2300-03	.3126-03	.1630	1.923	539.4
27	3.0000	.42500	40.000	.1070-01	.8800-02	.1190-01	.2455-03	.2022-03	.2749-03	.1430	1.700	539.4
27	3.0000	.45000	41.000	.8800-02	.7100-02	.9800-02	.1981-03	.1632-03	.2218-03	.1160	1.324	539.7
27	3.0000	.47500	42.000	.7500-02	.6200-02	.8400-02	.1719-03	.1417-03	.1925-03	.1000+00	1.71	538.5
27	3.0000	.50000	43.000	.5400-02	.4500-02	.6100-02	.1245-03	.1026-03	.1394-03	.7300-01	.8120	538.5
27	3.0000	.52500	44.000	.3900-02	.3200-02	.4400-02	.8996-04	.7414-04	.1007-03	.5300-01	.6180	537.9
27	3.0000	.55000	45.000	.3600-02	.2900-02	.4000-02	.8236-04	.6788-04	.9220-04	.4800-01	.5380	537.7
27	3.0000	.57500	46.000	.2000-02	.1700-02	.2300-02	.4669-04	.3849-04	.5225-04	.2700-01	.2980	537.2
27	3.0000	.60000	47.000	.4000-03	.3000-03	.5000-03	.9682-05	.7982-05	.1084-04	.6000-02	.6000-01	536.9
27	3.0000	.62500	48.000	.1800-02	.1500-02	.2000-02	.4066-04	.3352-04	.4551-04	.2400-01	.2630	537.0
27	3.0000	.65000	49.000	.1300-02	.1000-02	.2000-02	.4071-04	.3356-04	.4557-04	.2400-01	.2600	537.2
27	3.0000	.67500	50.000	.1200-02	.1000-02	.1300-02	.2678-04	.2207-04	.2997-04	.1600-01	.1680	537.3
27	3.0000	.69000	51.000	.3400-02	.2800-02	.3800-02	.7796-04	.6425-04	.8728-04	.4600-01	.5660	537.9
27	3.0000	.71500	52.000	.1000-02	.8000-03	.1100-02	.2295-04	.1891-04	.2569-04	.1300-01	.1660	538.2
27	3.0000	.74000	53.000	.1000-02	.8000-03	.1100-02	.2284-04	.1882-04	.2557-04	.1300-01	.1860	538.5
27	3.0000	.76500	54.000	.1000-02	.8000-03	.1100-02	.2339-04	.1927-04	.2618-04	.1400-01	.1790	538.6
27	3.0000	.79000	55.000	.7000-03	.5000-03	.7000-03	.1498-04	.1235-04	.1677-04	.9000-02	.8900-01	538.5
27	4.0000	.20000	71.000	.2670-01	.2200-01	.3000-01	.6153-03	.5059-03	.6899-03	.3550	4.051	545.6
27	4.0000	.22500	72.000	.2050-01	.1690-01	.2300-01	.4723-03	.3886-03	.5294-03	.2730	3.204	543.9
27	4.0000	.25000	73.000	.1920-01	.1580-01	.2150-01	.4421-03	.3638-03	.4955-03	.2950	3.004	543.1
27	4.0000	.27500	74.000	.1780-01	.1470-01	.2000-01	.4105-03	.3379-03	.4599-03	.2380	2.951	542.1
27	4.0000	.30000	75.000	.1970-01	.1630-01	.2210-01	.4545-03	.3741-03	.5072-03	.2640	3.462	541.7
27	4.0000	.32500	76.000	.1460-01	.1200-01	.1630-01	.3351-03	.2759-03	.3753-03	.1950	2.559	540.6
27	4.0000	.35000	77.000	.1180-01	.9700-02	.1320-01	.2714-03	.2236-03	.3040-03	.1580	2.077	539.8
27	4.0000	.37500	78.000	.8800-02	.7300-02	.9900-02	.2026-03	.1671-03	.2271-03	.1180	1.553	539.4
27	4.0000	.40000	79.000	.5900-02	.4800-02	.6600-02	.1348-03	.1111-03	.1509-03	.7900-01	1.034	538.5
27	4.0000	.42500	80.000	.4400-02	.3700-02	.5000-02	.1021-03	.8410-04	.1143-03	.6000-01	.7830	538.4

DATE 07 OCT 75

04-74 (AEDC V41B-88A) HEATING DATA ON ORBITER FUSELAGE PORT SIDE

PAGE 327

04-74 (AEDC V41B-88A) 862C12F10H16M127E52V8R19

(RVB005)

RUN NUMBER	TRAJE	X/L	T/C NO	H/HREF R=0.9	H/HREF R=1.0	H/HREF R=TAN	H19T0 BTU/ R F12SEC	H1T0 BTU/ R F12SEC	H1TAN BTU/ R F12SEC	QDOT BTU/ F12SEC	DTMDT DEC. R /SEC	TH DEC. R
27	4.0000	.45000	62.000	.3400-02	.2800-02	.3800-02	.7855-04	.6473-04	.8794-04	.4600-01	.5960	538.1
27	4.0000	.47500	63.000	.2500-02	.2100-02	.2800-02	.5818-04	.4795-04	.6513-04	.3400-01	.4340	537.8
27	4.0000	.50000	64.000	.2200-02	.1800-02	.2500-02	.5098-04	.4202-04	.5706-04	.3000-01	.3700	537.5
27	4.0000	.52500	65.000	.1700-02	.1400-02	.1900-02	.3879-04	.3197-04	.4342-04	.2300-01	.2820	537.7
27	4.0000	.55000	66.000	.2300-02	.1900-02	.2500-02	.5194-04	.4281-04	.5814-04	.3000-01	.3570	537.6
27	4.0000	.60000	67.000	.6000-03	.5000-03	.7000-03	.1419-04	.1170-04	.1588-04	.8000-02	.9400-01	537.1
27	4.0000	.65000	68.000	.1000-03	.1000-03	.1000-03	.2137-05	.1762-05	.2392-05	.1000-02	.1500-01	537.4
27	4.0000	.70000	69.000	.1000-02	.8000-03	.1100-02	.2260-04	.1863-04	.2531-04	.1300-01	.1470	538.3
27	4.0000	.75000	70.000	.1300-02	.1100-02	.1500-02	.3056-04	.2519-04	.3421-04	.1800-01	.2000	537.6
27	4.0000	.80000	75.000	.6000-03	.5000-03	.7000-03	.1447-04	.1192-04	.1620-04	.8000-02	.1020	538.7
27	4.0000	.85000	76.000	.4000-03	.3000-03	.4000-03	.8857-05	.7297-05	.9916-05	.5000-02	.6100-01	538.8
27	4.0000	.87500	77.000	.2400-02	.2000-02	.2700-02	.5578-04	.4595-04	.6245-04	.3300-01	.4280	538.6
27	4.0000	.90000	78.000	.3500-02	.2900-02	.3900-02	.8040-04	.6624-04	.9002-04	.4700-01	.6090	539.1
27	4.0000	.92500	79.000	.4200-02	.3400-02	.4700-02	.9569-04	.7882-04	.1072-03	.5600-01	.6910	539.8
27	4.0000	.95000	80.000	.3400-02	.2800-02	.3800-02	.7754-04	.6388-04	.8682-04	.4500-01	.5310	539.2